

*The American Journal of*

# CLINICAL MEDICINE

*Dependable Therapeutic Fact for Daily Use*

J U N E

M C M X V I I

## *Are You Ready?*

**T**he black mouths belch and thunder and the shrapnel shrieks and flies;

Where are the fain and the fearless, the lads with the dauntless eyes?

Will the moment find them wanting? Nay, but with valor stirred!

Like the leashed hound on the coursing ground they wait but the warning word.

—Clinton Scollard

# Internal Hemorrhage

EASILY CONTROLLED By Internal Administration of



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Society of Chemical  
Industry in Basle,  
SWITZERLAND

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Dissolve contents of a five-gram vial of COAGULEN CIBA in two ounces of Saline Solution or pure water and administer in tablespoonful doses every fifteen minutes until consumed.

*Quick action* obtained by *intravenous injection* of 20 c. c. of a 3 to 5% solution of COAGULEN CIBA.

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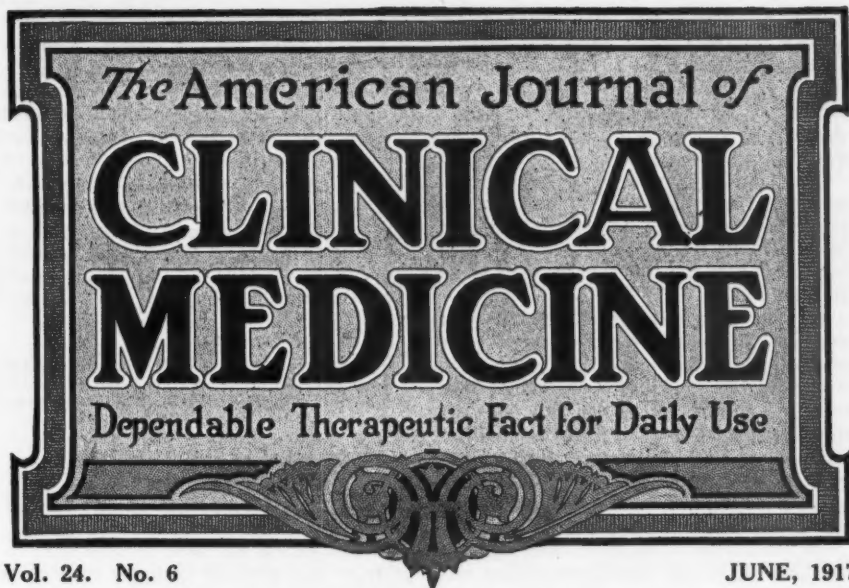
Blood impoverishment is seldom corrected by iron alone—or by ordinary forms of iron.

## *Hemaboloids* - ARSENIATED (WITH STRYCHNIA)

supplies not only iron but iron in the most assimilable, easily utilized form. It also furnishes reconstructive nutrient tonic and anti-hemolytic agents.

It is, therefore, most useful in the severest forms of anemia and allied conditions.

THE PALISADE MFG. CO.  
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## After the War—What?

IN THE last number of *CLINICAL MEDICINE*, one of our staff eloquently explained the recurrence of war on biologic and material grounds. The writer of that editorial declared that men fight because they have the instinct to battle. The restraints of civilization hold them back for a time; sooner or later, however, the pentup forces of primeval manhood must break forth again, and the longer the interval between wars and the greater the repression, the more terrible the result in the end. The achievements of the last century or so have given man weapons and wealth with which to destroy one another and have made the stakes of conquest larger, but, they have left human nature unredeemed and unchanged. According to this view (and probably it is, or has been, an expression of the general opinion of the world), there can be no permanent peace.

May another member of the staff (who is an optimist, not a "pacifist") be heard on this topic? He is not prepared to admit that man must always remain the avaricious, primeval brute, whose actions and reactions in the main spring from his desire to take from his neighbor, by force or otherwise, the things which he desires for himself. Nor can he

admit that the nation must be modeled upon the pattern of the savage, the robber, the murderer, knowing no law, guided solely by the instinct of unrestrained acquisition or, as it is more politely dubbed, "expansion"—an instinct that can be gratified only by seizing the territories or destroying the commerce and resources of neighbor-nations.

This writer is firm in the faith that a new spirit is coming into the world. Go back into history, and you will find always that the great mass of men have been treated as unconsulted, unconsidered, unreasoning tools, to be used for carving out new empires for Cæsar or to put gold into the pockets of Croesus. Dynastic ambition and the love of power and wealth on the part of the few—not the love of slaughter on the part of the many—have been the underlying causes of war. It is because the few have been strong and the many were weak and voiceless that the world has been compelled to yield to this terrible arbitrament.

And the new spirit is expressed in the word "democracy." Not in the name, but, in the thing itself. When the people of the world understand to the full their Samson-like strength—and they are learning fast, as

Russia has shown—the old temple of the war-god will come crashing to the ground.

In the people lies the power to change the system. This writer believes that at the peace-parleys this tremendous power of the world's masses will find expression; and that, in this way, the war will prove to be a war of liberation—a holy war. Every nation engaged in it is learning to appreciate this growing strength of the human mass, and those at the top either welcome the change or fear it, as they may be imbued with the democratic or autocratic ideal.

The last fifty years have been the most wonderful in the long record of man on the earth. This writer is glad that he has lived in this Age of Gold. How marvelous have been the additions to the world's knowledge! How greatly have we added facilities for man's comfort and happiness! Unfortunately, that at which genius has so gloriously conceived the craven brain of man has wickedly exploited for private advantage.

For some time there have been signs of the birth of a new conscience. Time was when the first question regarding any enterprise was—Will it pay? Now we wish to know whether a thing is morally sound. The slogan of the Associated Advertising Clubs of the World is, "Truth." We have seen the awakening of a new spirit of mutual responsibility in medicine, within recent years. We are demanding the destruction of the alcohol-evil. President Wilson practiced a toleration with Mexico based upon the Golden Rule. The same moral influence is felt everywhere, throughout our whole society. The old policy of exploitation and spoliation is going out of business, out of politics, out of government. Our life is becoming more and more saturated with the ethical ideal, and, in order that any public or business policy may appeal to the people, it must square itself with the ethics of the Nazarene.

It is coming, at last, to be appreciated that when Justice draws her trial-balance it will be found that Right has gained and Evil has lost. Wars themselves are largely diplomatic chickens that will come home to roost, some time or other. They are *not* engendered by strict adherence to the maxim of the "square deal." Who of us can fail to recognize this fact today?

It is this growing tendency to seek spiritual recompense in life as not less important than material gain which convinces this writer that there will rise from out of the ashes and the devastation of this war a new and more glorious, a spiritually richer world, yet not

less wonderful physically than the old one—a world in which war will have no place.

Is this but the expression of a hope? If so, it is a hope that is shared by millions whose eyes are open at last. It is this hope which led America into the war, because she realized—dimly, it may be,—that the Golden Age of Peace could never be attained until the autocratic concept of the State as a power justifying its cruelties and oppressions—and its culture—upon the hypothesis that might makes right, that the end justifies the means, that necessity knows no law, is driven from the world.

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It is wonderful how Virtue turns from dirty stockings; and how Vice, married to ribbons and a little gay attire, changes her name, as wedded ladies do, and becomes Romance.—Charles Dickens.

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#### EMETINE AS A WAR-REMEDY

Those who are working on the medical problems of the war should not forget emetine. This alkaloid, as has been demonstrated repeatedly, is a powerful agent for the control of hemorrhage. It is not claimed that it will take the place of compression, the ligature or other mechanical measures for arresting the flow of blood from a severed artery; but, it is believed that it will control oozing better than any other hypodermatically administered remedy heretofore employed.

Emetine has been used successfully to control severe nosebleed, intestinal hemorrhage, hemorrhages from the throat and nose following surgical operations, and (in the French army) in hemoptysis resulting from penetrating gunshot-wounds of the chest.

This remarkable alkaloid certainly deserves wide general employment as an emergency-remedy in the field.

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#### DO YOUR BIT

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It is said that 25,000 physicians will be required by the army and navy of the United States in the war with Germany. Likewise, many of those who stay at home will, naturally, be compelled to assume additional burdens, not only to care for those at home, but for possible relief of all kinds connected with the prosecution of the war.

What are you going to do?

This is a question which every man should be asking himself. There will be work enough for every man able to work, and certainly in the medical profession there will be no slackers. The active service at the front will, as a matter of course, fall upon the younger



men; but, there is not a man among us who is not capable of contributing something to his country's cause.

At least you can help in Red Cross work. In this, Chicago has set the pace for the entire country. In two days, it has pledged to the membership of the Red Cross more than 200,000 persons. In one day of red-hot campaigning, 166,000 members were pledged in this city. What we are doing here every community should be doing, and in promoting interest in this work the doctor should take a prominent place. The Red Cross is working for a total membership of a million members. This should be easy; indeed, we ought to have five million members in this great organization. The membership-fee is but \$1.00, or \$2.00 with subscription to *The American Red Cross Magazine*. We shall be very glad to receive subscriptions from our readers, and will forward them, without charge, to the headquarters in Washington.

The worst crime in man is selfishness. . . . No progress . . . can be made unless there be self-devotion to the general good of mankind.—Annie Besant.

#### OUR RESOURCES IN MEDICINAL CHEMICALS

Look at the chart which we are printing on this page. Chances are that it will make you swell up like a pouter-pigeon and declare—as you have a thousand times before—that this is the greatest nation on earth; that we are absolutely self-sustaining; and that, backed, as we are, by more food, more cotton, more steel, more petroleum, more coal, more copper, and more money than any other country, we can and shall dominate the world in an industrial way, war or no war.

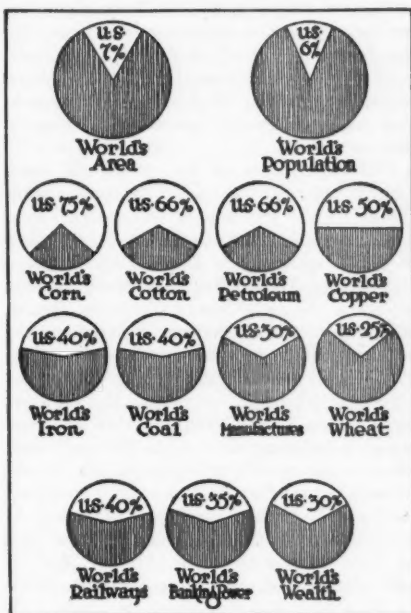
We are all proud of our country and well satisfied with its resources. And so we should be. But, this is not a time to take stock of our strength so much as of our weakness. What do we lack? That is the important question.

One class of products we know of we do not produce in nearly the quantities that we should. Chemicals! Before the great war, this industry was dominated by the Germans. Thanks to the artificial stimulus of tremendous demands for high explosives and dye-stuffs at unheard of prices, we are now pretty well prepared to meet the demand placed upon us for these commodities by our entry into the struggle.

We are not so fortunate, though, in the matter of medicinal chemicals. Many of these, some of them now considered essentials

by the medical profession, are controlled by German firms, because they hold patents which prohibit competition, even though the foreign maker is unable to supply this country's requirements. Many of these products can not be patented in Germany, but are patentable in the United States, thanks to the archaic nature of our patent-laws.

Do you not think that, in all fairness, these patent-laws should be revised at once in such a manner as to permit the immediate pro-



duction by American manufacturers of all medicinal preparations needed by our people? We are not temperamentally inclined to be fond of the "dog in the manger"; shall we continue, then, to run the medicinal chemical business of this nation in the interest of the foreign and enemy dog in the manger?

If you believe that we should seize this opportunity to loosen the grip of the foreign chemical-maker upon the throats of the profession, drop a line to your representatives in congress and tell them how you feel about it.

#### AND STILL THERE IS TETANUS!

It would seem that evidence enough has been presented to demonstrate to the satisfaction of any reasonable practitioner of medicine that tetanus-antitoxin is one of

the really indispensable remedies which every doctor should use, and use often. But, evidently, proof enough of this kind is not yet forthcoming, for, certain it is that many thousands of doctors have never yet administered a single dose of this remedy; yet, for all that, there are few physicians who have not gone through the stress and anxiety of attending a fatal case of tetanus.

We know now that tetanus is a preventable disease. Why, then, this neglect on the part of the general practitioner? We confess that we find it hard to explain, unless from the standpoint of cost of the remedy. Tetanus-antitoxin does cost money, of course; it is an expensive remedy. And, yet, how inexpensive when measured against the value of human life!

The experiences of the great war have proven some things and disproven other things. Take this matter of tetanus. In a paper recently contributed to *The British Medical Journal* (Jan. 27, p. 118), Surgeon-General Sir David Bruce paints a graphic picture of the awful loss of life, in the British army, from tetanus during the early months of the conflict in France. In September, 1914, there were 16 cases of this disease per 1000 wounded. In October, the number increased to 32 per 1000, and then the next month it fell abruptly to 2 per 1000, at which figure it has remained approximately to the present time. How is this sudden rise and sudden fall to be explained? The key is given by Sir David in a telegram dispatched by Lord Kitchener to the director of medical services of the expeditionary force, on September 8, 1914, which he reproduces, as follows:

"Earl Kitchener desires information as to whether antitetanus inoculations are being practiced for the wounded and whether, if not carried out in the field-units, they are carried out in communication-units. He wishes all to be impressed with this."

As a result of this telegram, something was done, and at once; but, it was not until the middle of October that the practice of prophylactic inoculation of all the wounded was introduced on anything like a complete scale. As soon as it was undertaken comprehensively, a remarkable fall in the incidence of tetanus took place. Early in October, many wounded had not been inoculated, but, by the middle of the month, the supply of tetanus-antitoxin sent to France became nearly equal to the demand, and its use became practically universal. The result was, the immediate and per-

manent decline in the number of cases, as mentioned.

It is interesting to learn that in August, 1914, only 600 doses of tetanus-antitoxin were sent to France for the treatment of British soldiers. In October, 48,000 were sent; in November, 112,000 doses, and, in December, 120,000 doses.

Equally striking results following the use of prophylactic injections have been testified to both by the French and the Germans. Bazy pointed out that in the French medical units where prophylactic injections were given to all the wounded the incidence of tetanus was 4.18 per 1000, while in medical units where these injections were made only in suspicious cases the incidence of the disease was 12.79 percent.

Kuemmel, in the *Berliner Klinische Wochenschrift*, arrives at the same conclusion. He declares that tetanus has largely disappeared from the German army following the general use of prophylactic injections of antitoxin.

Among English surgeons, it seems to be the custom to give the wounded two prophylactic injections of tetanus-antitoxin, of 500 units, each, at intervals of about seven days. As Sir David Bruce points out, such dosage can do no harm, and "there can, surely, be no doubt in anybody's mind that an ounce of prophylactic serum is worth pounds of the same serum used therapeutically".

With evidence of this kind constantly accumulating, why is it that American physicians, supposed to be the most able and the most resourceful in the world, are so slow in taking up this expedient and applying it in civil practice?

Can anyone answer? We confess, it's too hard for us.

Circumstances are the rulers of the weak—they are but the instruments of the wise.

—*Lover in "Rory O'More."*

#### WHAT SHALL I TAKE?

With our entrance into actual war, many of us will be called upon for service. The man who can give better and quicker service, who can save life by instant effective aid is the best man. And that is the man who goes right forward with the advance, carrying with him to the fighting-line the means of instantly remedying hurts that would kill without prompt relief. That means the man who carries with him a case of alkaloids.

A pocket-case with 6 vials, each holding 100 or more hypodermic tablets, together

with a syringe, would give an outfit that could save many lives. Atropine, emetine, strychnine, glonoin, and the hyoscine-morphine and atropine-strychnine-glonoin combinations are suggested. These would cover many of the needs of the firing-line. Shock, hemorrhage, collapse, pain, nervousness—these one would be likely to meet there. Many a life is lost from bleeding which a timely dose of emetine or atropine would stop. The agony following a wound can not be relieved too quickly. Shock and collapse can not wait for the bearers to get the wounded men to the advanced hospital. Apparatus and appliances are out of the question. All that can be provided is, a little case of drugs and a man who knows how to use them—but, look at the possible results!

Of course, this outfit is only a part of what the doctor on the firing-line should carry. Convenient and potent antiseptics—such as chlorazene—ready-prepared dressings and bandages, a few instruments for emergency use—all these are essential. But, the hypodermic case, filled with the vital remedies suggested, is of equal importance.

Who has further suggestions? Help us to contribute something to the solutions of this problem.

Work is a great blessing. After evil came into the world, work was given as an antidote, not a punishment. The punishment is pain.

#### THE CREED OF A DOCTOR'S WIFE WHO ALSO WAS HIS ASSISTANT

In looking through the file for 1915 of CLINICAL MEDICINE, the other day, I came across Doctor Hollmann's tribute to his wife, whom he had lost only shortly before. I read this moving and, yet, stimulating letter over, and again I realized how bereft the good Doctor must feel without his loyal and courageous helpmeet. What impressed me as particularly worthy of note, and well worth printing again, was, Mrs. Hollmann's creed; a creed that well might be adopted by every physician for his guide. This creed speaks for itself, so, I print it here without further comment.

"Never undertake to treat even the poorest, unless you are resolved to give him the very best you can; if it be only a dog you operate upon, do not be careless with your instruments because it is merely a dog. If you give some surgical service, do not fail to take all the pains in antiseptics and asepsis, exercising the same care you would when treating your very-best-paying patient or dear-

est friend. It is far more honest not to undertake a case than to give slovenly service."

Good? It's fine! Let's all act up to this creed, and remember that it was given us by a physician's wife and true helpmeet.

#### GET "GEAR," SANDY

The son of a multimillionaire came to grief. The observer said, how could he help it? Think of the way such a boy grows up. He is not raised. His father never has any time to spare the boy; he is surrounded by self-seeking flatterers and sycophants, ever ready to purvey to his appetites; he has far more money than is good for any youth; and he never has the incentive to learn or to do. The only salvation for him is, the acquisition of a life purpose, a something he wants so enormously, with such a whole soul, that it absorbs him and impels him to bend everything, to exert every effort of which he is capable, to its accomplishment. Then he may forget himself and his little pleasures in the pursuit.

Something of this was transmitted to his widowed mother. She angrily replied that the critic knew nothing of the circumstances—the boy had gone into the real-estate business and was so absorbed in it that she had feared lest the close application might injure his health. And what greater life-work could a youth have than making two grow where but one had existed?

"Two" what? Evidently she meant two dollars. The whole story is there. We do not need to know the number of his office, the name of his errand boy, nor even the bank at which his deposits were made. We can reconstruct the whole story, from the time when the budding aspirations of the youth just approaching manhood were crushed by the hard practicality of the captain of industry and the youngster was sternly ordered to look upon the making of money as the one only vocation worthy of mankind. Possibly he had tastes for art in some one of its manifestations; but, judge of the domestic explosion when the boy made that announcement! Gorged with money, surfeited with luxury, nauseated with the flunkeyism that shut him out from wholesome contact with the big world of Boyville, he is compelled to get into the traces and pull the load his father had collected. If only the prince could have changed with the pauper! But no such luck happens in real life.

The result is as unrelenting as the multiplication table. The youth who is absorbed in

his business of making two dollars grow where one had been, by buying land by the acre and selling it by the foot, suddenly breaks away and astounds the world by his depravity. Real estate engrossed him? Good heavens, how can even a mother be so blind!

But what does any woman know about her son's doings, anyhow? Mighty little. From away back in the dim regions of the past, we evolve the shade of a boyhood town mate—we will call him Johnny Brown. Now, our young life was made miserable by this same Johnny Brown. Johnny Brown always carried in the fire-wood and provided the kindling; he always washed his face and cleaned his shoes; never was tardy to school, always knew his lessons and could repeat the text. Ever and anon our mothers would put to us unregenerates the query: "Why can't you be like Johnny Brown?"

If ever there was a boy hated in that community it was Johnny Brown. But, sweet revenge was ours—one day something happened in the Brown household. What it was we were not told, but, we overheard whispers about a servant girl, and Mrs. Brown paying her \$300. We brats were too young to understand it, we did know, though, that Johnny Brown had fallen from grace, had fallen far and lit with a thump. Thenceforth we had it on our mothers—every time they complained of us we had only to exclaim: "I s'pose you want me to be like Johnny Brown," and there was silence. We rejoiced. We almost got to love Johnny Brown, and no human dereliction was ever more joyfully welcomed than was the unknown sin of Johnny Brown. Boyhood in that community was liberated from maternal rule and enjoyed its freedom with a zest unknown except to the enslaved set free.

Take one of these good, sensible women with practical ideas, one who crushes the aspirations of her son toward an artistic career and sternly herds him into the one only vocation for a man in this age and land—moneymaking. Pull her up by the roots and set her out in the soil of Judea some nineteen centuries back. Worrying over some occurrences among her neighbors, she concludes that it is her duty to go and see one of them and show her where she is making a great mistake.

"Mary, I feel it my duty to tell you that you are not doing right by your son. Here he is loafing about with a set of disreputables, dirty, smelly fishermen, and with that Mat Murphy—nothing but a barkeeper, although he has got into politics and is the tax-col-

lector—more shame to men like my husband who let such canaille rule the town. Then the women your son associates with are worse. That Mary is nothing but a Magdalene; and such goings on as they are having—why, I hear that she actually washed his feet and dried them with her hair. If she did that—and such doctrines as he is spreading among the lower classes, making them discontented with their betters and deriding the priests. He does not seem to have any respect for authority or position, whatever. What are we coming to, when we hear of this gang throwing all their possessions together and sharing in common? Where are we, who have saved our money and invested and made good bargains, going to get off if such ideas become common? Now you just hunt up some smart girl who will fetch him into line; raise a family and see that he supports it. If he attended to his trade with his father, he might soon have a shop and a home of his own—we have a nice little cottage we will sell him cheap—and he would soon get rid of these wild ideas and let that Pete Costello and Simon Cello get back to their nets. And that Jude—I never could abide that fellow—he gave me a bad shekel one day. There isn't a decent man of standing in the lot, unless it is that Doctor Luke, and he is not a regular and never passed the examining board. Of course, there is Johnny, a nice enough boy if only he had a clean face and wore his hair in curls. I shouldn't mind taking him on as a helper about the garden, if I did not fear he would corrupt the other servants and start a strike.

"Now, Mary, just take this to heart and act upon it; and if you succeed I'll get my husband to use his influence and get your folks some of the royal carpentering-jobs. Well, by-by, I must be going."

If there is any better rule on which to run a business than the Golden Rule, it is yet to be discovered.

#### AN EXPERIENCE WITH NERVE-BLOCKING

Albert O. Singleton has been trying out the method of anesthesia by nerve-blocking, at the John Sealy Hospital at Galveston. The agent which he preferred to use was novocain, by infiltrations in the form of a 1-4-percent solution containing a small addition of suprarenin. Of this, he says (*Tex. State Jour. Med.*, August, 1916), any quantity desired can be injected with

perfect safety. For nerve-blocking, he employs a 1-2 or 1-percent solution, or, for spinal anesthesia, 1 or 2 mls (Cc.) of a 5-percent solution.

The most satisfactory region amenable to blocking he finds to be the perineum, rectum, urethra, and all structures supplied by the sacral nerves, from the second down—this being termed sacral anesthesia. From 20 to 30 mls of a 1-percent novocain-solution, with 1-percent of calcium chloride added, or twice as much of a 1-2-percent solution, is injected into the sacral canal. The needle can be most accurately introduced with the patient in the knee-chest position. A spinal-puncture-needle is passed up the sacral canal through the terminal opening, on the dorsal surface, an inch from the tip of the sacrum. A few drops of the same solution are first injected under the skin, to anesthetize it. Singleton thinks a large quantity of the weaker solution the more effective.

In but one case did Doctor Singleton fail to secure sacral anesthesia. After from ten to thirty minutes, this anesthesia was complete over the entire perineal region, including the scrotum, rectum, penis (except at its base), urethra, bladder, prostate gland, vagina, and cervix. He gives a list of 128 operations done under this method; these comprising such radical procedures as prostatectomies (6), operations for hemorrhoids (8), external urethrotomies (26), and so on.

The present writer saw Doctor Singleton do one operation, a perineorrhaphy, under sacral anesthesia. The patient evidenced no pain from the operation, but complained incessantly about one leg, which was suspended as usual nowadays. We must say that we much prefer the yoke to the rigid uprights with bandage attachment. Following the operation, there was considerable complaint of pain in the back for more than two days. Since this pain subsided when the vaginal packing was removed, this may have been the cause of the suffering; but, our impression was that part at least was due to the mechanical or the chemical irritation produced by the solution in the sacral space.

Comparing this case with those in which this writer has operated, with the use of the morphine-hyoscine combination, he must say that he prefers the latter. There was too much hemorrhage in the case in question; not dangerous or debilitating, still, enough to interfere somewhat with the surgeon's work—at least much more than when the mor-

phine-hyoscine is employed. Also, there was considerable nausea, a thing which, as well as postoperative pain, does not figure after the morphine-hyoscine operations.

However, it would be most unjust to judge any method from a single example, and Doctor Singleton's results have been too good to warrant the rejection of this one or to fail to give it full and impartial trial. Best probably, is a combination of the general and local anesthetics, as employed by Crile.

The skill and judgment of the operator, the finely equipped hospital, the interested and sympathetic nurses, the outlook over the closely packed buildings of Galveston's lovely city and the treacherous gulf that basks in the sunlight or tosses its billows against the huge sea wall, the life-renewing breezes that sweep across the coastal lands, these have no part in the scientific discussion of a moot point of modern surgical technic, still, they are not without import in the battles for life waged in these surroundings.

One of the handicaps that medicine has to contend with, is the frailty of the human mind in letting go the tried and good measures in its avid grasping for something that will yield better results.

—Dr. W. A. Haman.

#### ON THE STUDY OF MEDICINE BY PHYSICIANS

It is a trite saying that, upon graduation from the medical college, the young physician hardly is supposed to know medicine, but, rather, it is expected that he has learned how to study medicine. Likewise, it is a fact that the study of medicine can never be considered as completed; but that it must be continued and pursued constantly if the physician desires to progress with his profession and to keep up with the ever increasing sum total of medical knowledge.

In common with other medical periodicals, CLINICAL MEDICINE always has maintained an abstract-department in which brief information is given on such discoveries and practical articles published elsewhere as is held to be of interest and service to its readers. Many of our readers assure us that they regard the "What Others Are Doing" department as a very valuable one and that they often receive much benefit from it. This is pleasing, naturally, and encourages us to continue the examination and sifting of many other medical journals for the benefit of the CLINIC "family".

It goes without saying that it is impossible for any physician to keep up with all medical



literature, hence he must depend upon the abstract-departments of his medical journals to point out to him those important articles on topics that may be of interest to him that may have appeared elsewhere. It is not well, however, to depend entirely upon such abstracts and to ingest new knowledge exclusively in the form of "compressed tablets", as it were. Every physician in course of time learns to do one particular thing better and ever more better; and, to the degree in which his technic and his knowledge of this branch is perfected, he naturally specializes in it. For this, a detailed knowledge of the theory and practice is essential, and then the need of studying original contributions to literature becomes urgent. Referring to the benefits to be derived from studying original articles, as compared with the reading of textbooks or abstracts, the editor of the English edition of Bunge's "Physiologic and Pathologic Chemistry" puts it this way: "It is essential to the healthy development of the thinking-powers that they should have some work to do, and not be nourished solely on a diet of already digested material".

Thus, then, the study of abstracts and of condensed articles is necessary and excellent for the purpose of maintaining a general information of medical investigations and acquirements. But, in those branches of special work which appeal more particularly to individual physicians, the study of textbooks and of abstracts no longer is sufficient; here, monographs and original articles must take their place, for, only in this manner can a complete theoretical knowledge on special subjects be obtained. And even this requires confirmation and activation, as it were, through the practical experience that can be gained only by personal clinical work.

#### ETHER INHALATIONS FOR TUBERCULOSIS

Doctor Landis, of Cincinnati, advances the suggestion that the inhalation of ether may have a germicidal action upon the tubercle-bacillus. One would think that, were this so, it could scarcely have escaped detection during so many years. Still, the history of therapy does not warrant a conclusion so sweeping and so apparently probable. It is a question whether there is a single agent in our materia medica of the powers of which we have complete knowledge. Let us look at Doctor Landis' case.

A man with acute pleurisy was admitted to the hospital, and during 4 and 1-2 weeks

his temperature ranged from normal in the morning to 101 degrees or higher in the evening. Pleural fluid was withdrawn three times. The respiration was neither difficult nor painful and was not greatly accelerated. The pulse never exceeded 110 beats per minute. The appetite was poor. Emaciation was rapid.

Then ether was given, under the closed cone, for thirty-five minutes. An immediate fall in the evening-temperature was observed, and it never rose to 101 thereafter, reaching 100 or above on five days only, but generally remaining between normal and 99.3°F. Immediate improvement of the appetite followed; sleep was disturbed only by hunger, and by the thirty-fourth day after the first etherization his weight had risen from 103 pounds to 122 pounds. Ether was given again twenty-seven days after the first administration, this time for but fifteen minutes.

The diagnosis of a tuberculous pleurisy rested upon the x-ray findings, as the numerous sputum examinations were all negative. Doctor Landis concludes:

"While there may be room for a difference of opinion as to whether this patient had tuberculosis or not, there can be no doubt as to the immediate and continuous improvement following etherization".

Well, why not? It should be easy enough to find opportunities for trying out the method thoroughly; especially in cases where there are numerous bacilli in the sputum.

Of course, it must not be forgotten that ether narcosis has been held responsible for at least some of the frequent attacks of post-operative pneumonia; it being claimed that the resistance to an existing, latent, pneumococcus infection is diminished or that the germs are liberated and "mobilized". This would be a serious objection to the treatment.

When you hear a person make a great hullabaloo over his virtue, look out for an apple with a rotten core.

#### "MERELY FUNCTIONAL!"

Tick-tock, tick-tock goes the clock. Backward—forward—backward—forward swings the pendulum—never stopping, never resting, it marks off the moments while time swings on into eternity.

So ebbs and flows the tide of human opinion, swinging backward and forward, never coming to a standstill. Nothing is fixed, nothing is absolutely and forever settled. Nothing is absolutely right, nothing eternally wrong. Current medical thought approved a

proposition yesterday, condemns it today, will revert to it tomorrow.

In our haste, in moments of impatience and shallow thought, we chafe at this and want the clock to stop just where we are. Does truth ever stop? Truth surrounds us as an illimitable ocean. Into this, our ancestors projected the light of their feeble candle and wherever they turned its rays they discovered new shapes looming out of the darkness. The flickering beam gave uncertain, fantastic outlines to their vision, and they fought each other to the death to defend each the conception his glimpse had afforded. We turn on our powerful electric searchlight and see further and more distinctly—but, do we presume to assert that we reach the limits?

The swinging pendulum is not quite the correct simile for the medical profession. We have jammed one way like the people in a car that runs against obstruction, and thus we have taken to the anatomosurgical theory. Disease was ever and always an alteration of structure, and as we were unable to rebuild tissue, the only thing was, to remove the morbid elements.

The mind of man tends constantly toward simplicity in his explanation of phenomena, so, when once we accepted the germ-theory, we carried it to brutal limits, assigning as the one etiologic factor the bug. Logically, the science of therapeutics resolved itself into the study of means of killing the bug. The furthest swing was marked by the declaration of one of our most distinguished advocates of the germ-theory. "Inflammation is due to irritation, and this must be induced by either a material or a chemical irritant; the one is the microbe, the other its product."

Has the backward swing set in? Turn to the review of Krehl-Beifeld's "Principles of Clinical Pathology." And, by the way, have you observed the unusual merit of our book reviews lately? The present writer, does not write those reviews, so, it is no self-praise; however, we do know how to appreciate good, thorough work in this line. He who skips that department of CLINICAL MEDICINE misses a very valuable part of the journal.

The student has been led, through the study of pathologic lesions, to the search for their causes and thus to the study of pathologic physiology, which presupposes a knowledge of normal physiology—and here he arrives exactly at the place to which we have been, for years, seeking to direct

his steps. He now begins to see a relation between disorders of functions and material lesions and to appreciate the vital importance of comprehending this relation, since by so doing he learns to recognize disease in its earlier stages even before material lesions have been inflicted.

How beautifully, how inevitably it works out. Every step in the right direction leads us to the grandest of all laboratories, the sick-room, to the study of the patient himself. It is live men with whom we have to deal, not dead ones. Living anatomy, living physiology, and living pathology are our true studies, and all else is important only in so far as it leads us to these.

Traced to its ultimate inception, every disease begins with a disorder of functioning. Material lesions come later in due and regular progression. Correct the initial functional fault, and the vicious sequence is interrupted, the progression stopped. This probably means that our therapy has removed the essential causal factors, for, it is a reasonable claim that the remedy that quells the symptom does so by removing the cause of that symptom. This is one of the fundamental truths that should form the basis of our work. Another is, that disease taken in its earliest stages, before material lesions have been inflicted, is curable.

The future progress of our science must be in the study of symptoms and their connection with the later stages, when material lesions have occurred.

In seeking to account for the existence of symptoms, we have long insisted upon the necessity of recognizing as basic the presence of a toxic element in the blood and its generation of local morbid conditions at the *locus resistentie minoris*. Clinical studies impelled us to see a common source of such toxins in the bowels. Recently the medical profession has recognized other sources in pus-foci in the tonsils, the gums, and elsewhere. The work of Driskill, the Texas specialist, to which editorial reference was made in our May issue, adds the antrum as another source, a source of infection scarcely ever recognized by the general practitioner. There are many others. We are establishing, as a routine in our work, the search for such disease-foci, and their eradication becomes a cardinal point for therapeutic attack.

It is significant that, since this movement has generalized, we see the indeterminate maladies grow ever more rare. Neurasthenia, general debility, malaise are being

discarded, while fecal toxemia now is universally admitted, the only discussion being as to just how far its influence extends.

"De worl' do move."

Too bad a feller doesn't get to really savvying this job of living before he gets so darn nigh ready to quit it.—*Julian Rothery.*

### THE FIRST PATIENT

Well, the boy has completed his college course, has earned, first, his A. B. and, finally, his M. D. degree, has passed the ordeal of the state board and has legally been admitted to the practice of his chosen profession; he has opened and equipped an office and hung out his signboard. He lacks just patients.

However, he need not wait—he has one ready to hand, a patient of the first importance to him, one for whose care he will receive a recompense that will never be equaled, be his career what it may. He may win through to such a height of professional success that he will stand on an equal footing with the greatest of his compeers, he may win as patients the multimillionaires who tender him their tens of thousands in payment for his work, but, all this will be less than his recompense for what he does for his first patient.

For, this first object for the exercise of his skill is himself. The newfledged doctor should utilize that blessed interval of leisure, before the office begins to fill up, in study of his own case. At this time, he can go over himself, organ by organ, function by function, make the most thorough and complete investigation, ascertain the exact condition, anatomically and physiologically and pathologically, and familiarize himself with every detail of his being. He can go on to estimate his own forces, his vitality, his working-capacity, the points where a breakdown is most likely to occur, the probabilities of his own longevity and the means of increasing his chances. He can study what may, for him, be the best mode of living, what he had best eat and drink, how many hours he should sleep, what rest and recreations he should have, the sanitary regimen best suited to his own self.

One of the most difficult things imaginable is, to distinguish between genuine need for rest and recuperation and simple laziness and desire for self-gratification. Indeed, if anybody thinks this matter of self-diagnosis is easy, let him try it—and submit his conclusions to his perceptor.

Another difficulty is, to estimate correctly just what one is worth and how far up his

natural powers should take him. Many a mediocre fellow wastes his life trying to land himself at the top, when his brain-powers fit him only to vouchsafe him success somewhere between the top and the middle. That pernicious maxim, "Plenty of room at the top," has filled many an early grave and contributed to swell the population of many an insane-asylum. There is no lack of conceit in our young graduates without such sententious nonsensical proverbs being set afloat.

I have been sitting at my desk now for weeks and weeks reeling out wisdom for my readers. Today I feel stretchy; my thoughts seem to stick in transmission somewhere, they do not run off smoothly and readily, there seems to be a yawyness about them, a sluggishness of utterance—and I know that somewhere the warm winds of spring blow in the open windows, the buds are bursting through the shoots of chinaberry trees, the blackbirds are competing with the mockingbirds, to make the welkin ring, the green grass and clover cover the burnt patches on the prairies and—there goes a kid with a fishing-rod! Say, you'll have to excuse me from the directors' meeting today, I have just met an old friend!

Strolling blithely down the street, we meet an acquaintance. He goes along with head down and, looking in his face, we get an idea of how Atlas must have expressed his opinion of holding up the earth—we never did understand why he did not drop it.

"Hello, Abe, come along and go fishing!" Abe looks up, sees the rod and for a moment his eye kindles—he used to enjoy it—but then the spark dies down and he shakes his head, the look of absorption returns and he goes on. Now, that man used to take his outing and, after a week, would return and make things fairly *hum!* He would be a human dynamo, would energize a hundred fellow workers. But not any more now; all that is gone, he is wholly absorbed in the task of making his million into two millions. Then he will die. Meanwhile, he hasn't any fun.

Darn your million. You can't buy with it anything that equals the song of those swamp blackbirds.

When a man has ruined his health by overwork, of what use is life to him? When he has lost the power of enjoying life, what is his million worth? Better take a week now at the duck shooting than a month later at the sanatorium.

Doctor, follow the ancient Greek aphorism, *gnothi seauton*, and know thyself with all the modern methods of knowing utilized.

# Leading Articles

## The Physician in War

By GUSTAVUS M. BLECH, M. D., Chicago, Illinois

Major, Medical Corps, Commanding Second Illinois Field Hospital, Chicago

*EDITORIAL COMMENT.—It gives us particular pleasure to present this communication dealing with the work of physicians in war time. The author is an experienced medical officer, formerly of the U. S. Army and now connected with the National Guard.*

WHEN these lines appear in print, barring unforeseen and most unlikely political events, the United States will be in the midst of active military preparations to equip and prepare a huge army for war with the central powers of Europe.

So little is known by the average practitioner of medicine, especially the one residing away from great medical centers, about medico-military matters, that a plain statement of our sanitary organization and resources for war certainly is opportune. Hence, it is with a good deal of pleasure that I comply with the request of the editorial department of THE AMERICAN JOURNAL OF CLINICAL MEDICINE to present to its many readers a brief statement, free from technicalities, on the subject of sanitary service in war.

First of all, it is important for every physician to realize that the possession of physical health and professional knowledge alone are not sufficient to qualify a doctor of medicine as a military physician and surgeon. Indeed, I make bold to say that, if we had to raise a new navy and army and these forces were supplied with any desired number of skilful physicians and surgeons taken from civil life only, the result would be wellnigh disastrous.

The second important thing to know is, that military surgery is a dual science, as compared with civil surgery. For my present purpose, it must suffice to divide military surgery into two divisions; namely, field-surgery and base-surgery.

Field-surgery is a science by itself. It is surgery modified by field conditions, ruthlessly made a mere craft of the pattern kind by military necessity and organization. Base-surgery is closely akin to civil surgery, except, possibly, that reparative surgery has to be done on a scale to which the civil

surgeon has not become accustomed, and that wholesale orthopedics, prostheses, and vocational training become problems of practical importance.

After these introductory remarks, we now will go more into detail.

The United States army and the United States navy are our regular permanent first-line land and sea forces of attack and defense. In time of war, both are increased by a partly trained citizen force, organized, equipped, and instructed like themselves, the former by the National Guard, the latter by the Naval Militia (or Naval Reserve). These also serve as nuclei for larger volunteer or conscript armies.

As the number of medical officers permanently connected with, and part and parcel of, these forces is not adequate in number to cope with the demands of war, their number is augmented by physicians from civil life.

For some years past, the surgeons-general of the army and navy have organized a medical reserve and have given these men commissions as officers in the medical reserve corps. Some of these men have taken their commissions seriously, they have attended special camps of instruction and have taken a correspondence course in medico-military subjects, while others accepted their commissions and let it go at that.

The authorities at Washington have not been idle, however. They have classified these men according to their professional standing, military training, aptitude for the service, and so forth; still, even at best the present reserve is not sufficient in size to fill the needs of a million-army.

### How Each Doctor Can Do His Bit

The Editor submitted to me this proposition: "Tell our readers how each can do his

bit." This terse but exceedingly practical question calls for a straight answer. I shall dispose of that first and then show the various fields of usefulness, both in the field and at home.

Every able-bodied physician, in good standing as a licensed practitioner of at least one year's practical experience, below the age of 45 ought to write at once to the Surgeon-General of the U. S. Army, Washington, D. C., tendering his services, giving name, address, age, school from which graduated, specialty (if any), and hospital and college appointments (if any).

These men may be invited to become officers in the reserve corps. A physical examination and a test of professional knowledge are customary, except for those who, through professional eminence, are known at Washington. The applicant should also state whether he is willing to serve at the front, anywhere in the United States, or at his home place only.

Physicians above 45 or such as have slight physical defects had best apply direct to the Director of Military Relief, American Red Cross, Washington, D. C. This, of course, does not include young physicians, who may find opportunity to join the various national-guard units in their home states.

#### Home-Town Services

Military activities at home that the government may ask of physicians willing to do their bit, are:

1. Recruiting: Officers and men, before being enlisted, are subject to a thorough physical examination. The men are stripped, weighed, measured as to height; vision and hearing are tested; lungs and heart are examined by auscultation and percussion; chest measurements are made for in- and expiration; thorough investigation of the presence or absence of skin lesions, venereal disease, hernia, varicose veins, joint affections, and diseases of the nervous system (Romberg, patellar reflexes, exercises, etc.) is made. Also, finger prints are taken, and scars, moles, and other marks are noted on charts. This last, for possible identification.

The rules for rejecting an applicant are published by the War Department, and any intelligent physician can soon acquire the knack of examining many recruits in a day with thoroughness.

2. Prophylaxis: Administration of typhoid-fever prophylactic serum; usually three doses in 10-day intervals. Vaccination.

3. Professional care of convalescent soldiers invalided home and of such soldiers remaining at home as recruit parties of guards, remount duty, supply duty, and so forth.

#### Service in the Field

1. Regimental Surgeons: These accompany regiments everywhere and to the firing-line. Must know military organization, interpretation of orders, map-reading, sanitary reports, and treat their officers and men in camp and on the march, and dress wounds, arrest hemorrhage, splint fractures, relieve shock on the firing-line, and prepare their patients for transport to the rear.

2. Ambulance Company Surgeons: Same as under 1. Must know much about handling litters and ambulances, both motor and horse-drawn. Must be able to establish dressing-stations, be prepared to do emergency surgery and transport the patients to the field hospital.

3. Field Hospitals: The field hospital (capacity 216 patients) is an emergency-hospital under canvas.

All military duties must be understood. Responsible officers must know tactics and be able to estimate situations. The entire therapy (surgical) is one struggle with the question: To operate or not to operate? Time, facilities, length and severity of injury, availability of base institutions, facilities for transportation, and ability of patients to stand transportation are grave problems which must be mastered.

Base Hospitals: Only surgeons with highest specialistic training are admitted. The military management is entirely in the hands of regular army officers.

Red Cross: This service relieves the regular personnel, beginning with the organizations in the rear of the field hospitals; it mans home hospitals, camps for convalescents, base hospitals (partly), points of embarkation, sanitary trains, and hospital ships. The Red Cross can utilize physicians to superintend the preparation, collection, and distribution of medicines, dressings, bandages, blankets, linen, and certain necessities or luxuries. Attendants may look after camps of prisoners of war and the interests of the dead. Certainly, a large field of humanitarian activity.





# Nonoperative Gynecology

By WILLIAM RITTENHOUSE, M. D., Chicago, Illinois

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[Continued from May issue, page 364.]

## Gonorrhea in Females

SEVERAL of the readers of CLINICAL MEDICINE have requested me to include in this series an article on gonorrhea in the female; from which I conclude that I am not the only one who has encountered perplexing problems in dealing with this ailment.

In discussing the various forms and consequences of this destructive disease as it presents itself to the gynecologist, it may be well to divide the patients into three classes; namely: (1) the "regulars"—meaning those who have acquired the disease in the usual way by voluntarily taking the risks of promiscuous intercourse; (2) the innocent wife who has been infected by a truant husband, and who often is ignorant of the true nature of her ailment, even while undergoing treatment by a physician who may hesitate to take the responsibility of the possible breaking up of a home by telling her the whole truth; and (3) the innocent little girl who has been infected by some older degenerate of the male sex or by coming in contact with a water-closet seat upon which gonorrheal pus had been deposited. From time immemorial, the male who has "loved, not wisely, but too well" has shown his belief in the gullibility of the medical profession, by trying to persuade his doctor that "he got it in the water-closet"; thus contributing his mite to the gaiety of the nations. But, so far as the little girl who enters a public privy is concerned, this matter is no joke, but is a very serious danger, indeed.

The number of cases of infection from this source that I have seen has often made me wish that I could warn every mother in the land not to allow her little daughter to go into a public water-closet unless accompanied by an older person, who can see to it that the necessary precautions against infection are taken. The child runs a much greater risk than the adult, because of the shortness of her legs. As she sits upon the seat, her feet do not touch the floor; so, when she starts to get up, she, naturally, slides forward on the seat till her feet strike the floor, thus bringing the vulva in direct contact with the front of the seat and picking up any infection that may have been deposited by a previous occupant. A few years ago,

a shocking epidemic of gonorrhea spread in this manner among the inmates of an institution for children in this city. The adult woman escapes the danger, because she rises directly from the seat, without having to slide forward.

## Etiology of Gonorrhea in Women

The cause of gonorrhea, of course, is infection with the gonococcus. But, the problem as it presents itself in the doctor's office is far from being a simple one. The question of etiology involves the *source* of the infection, for, in many cases, the pathology and consequent treatment depend largely upon this knowledge. One case may be a vaginitis only, while in another we may have such complications as urethritis, infection of the uterus, tubes or ovaries, or abscess of the glands of Bartholine, peritonitis or pelvic abscess. The possibility of gonorrheal infection lying dormant for years in either sex is so great that a patient may present herself with a recrudescence of an infection which she had believed cured years ago. Another may be the victim of a similar mistaken belief on the part of her husband or paramour.

I recall an instance where a wife was infected by her husband and after the usual treatment seemed to be perfectly cured. Eighteen years afterward, following a severe attack of grip, there developed an abscess of the gland of Bartholine. At once, before suppuration had taken place, I made a thorough examination of the vaginal and of the urethral secretions, but no gonococci were found. After suppuration had occurred, I examined the pus and found it swarming with gonococci, and within three days after lancing a specific infection both of vagina and urethra took place. Five years later, after another attack of grip, she had a specific vaginitis, which was mild and of short duration. In this case, the circumstances were such that I can say with certainty that no other source of infection was possible. I have seen many similar cases in which it was not possible to say as much.

After seeing a number of such cases, it is, perhaps, not very surprising that some doctors assert that gonorrhea never *is* cured, but that the little demon of a germ having once gained an entrance into the reproductive system of either sex proceeds to "dig itself in"

in some remote gland or lacuna, ready at any future time to light up a fresh conflagration. While this view probably is extreme, we know that it cannot be very far from the truth.

Right here, I wish to utter a warning against an injustice which occasionally is done to an innocent patient. Some doctors are fond of making sweeping assertions, but sweeping assertions are dangerous and unjust. We occasionally hear it said that pyosalpinx never occurs except as a result of gonorrheal infection. I once heard this asserted by the late Dr. Byron Robinson. But, I have had at least two cases of pyosalpinx in which the women had never been infected with gonorrhea. The assertion is unreasonable, on the face of it.

Why should we believe that the fallopian tube is capable of infection by only one kind of germ and immune to all others? What duct or gland is there anywhere else in the body that can not be infected by staphylococcus or streptococcus? I know doctors who, as soon as they meet a case of abscess of the gland of Bartholine, at once begin to question the virtue of the patient. I recall a case where a young lady of unquestioned honor attempted suicide when her doctor made this shameful accusation, and on no better grounds than the sweeping assertion of some other fool like himself.

It is, of course, indisputable that a vast majority of pus-tubes and bartholinian abscesses are gonorrheal, but, this is a very different matter from saying that they all are. The rarity of nonspecific salpingitis and bartholinian adenitis is due to location more than to anything else. The fallopian tubes and the glands of Bartholine are situated where they are freely exposed to gonorrheal infection, and very seldom to any other. When they do present nonspecific infection, it is usually systemic in origin. I have seen both pyosalpinx and bartholinian abscess occur in general furunculosis. Boils were breaking out in various parts of the body, and there was nothing surprising in the fact that these localities were not exempt.

#### The Diagnosis

The ordinary case of specific vaginitis is not particularly difficult to recognize: the pain, redness, swelling, and purulent discharge form a picture easily read. The one great mistake to be avoided is, forgetting that there is such a thing as nonspecific vaginitis, although that is not common.

Here, too, it is possible to do an injustice to an innocent woman, the more so as the symptoms of the nonspecific variety are occasionally as violent as in the specific. Happily, the microscope furnishes a certain means of differentiation when any doubt exists.

In chronic cases (which often are quite mild) and in all cases where the ordinary means of diagnosis are insufficient to determine whether specific infection exists or not, the microscope is indispensable. It may prove to be the protector of the innocent in a case like the following: A married man who years ago has sown his wild oats, and reaped his harvest of penalty, and believes himself cured, is disagreeably surprised, after some unusual indulgence in eating or drinking or after an attack of grip, to find himself in possession of a suspicious discharge. He at once suspects his wife and brings in the doctor to find out who is to blame. If the microscopical examination of the vaginal secretions is negative, the wife is exonerated and the husband is informed that he is merely the victim of a riot among some guests whom he has unwittingly entertained for many years. He should also be warned to suspend marital relations until microscopic examination of his own urethral secretions shows a negative result for a reasonable time. Even then the wife is lucky if she escapes infection at some time in the future.

This tendency of the gonococcus to lie latent in the genitalia of either sex is the cause of the vast majority of all cases of ophthalmia neonatorum. A prospective mother often carries unknown to herself the germs of gonorrhea and when her child is born its eyes are infected, unless intelligent preventive means are used; and too often neglect of treatment results in blindness.

When we contemplate all the misery caused among the innocent, to say nothing of the guilty, by this foul disease, we realize the need of better information on the part of our young men. The greatest enemy of his kind is the young ignoramus who goes about among his chums asserting that an attack of gonorrhea is a trifle and no more serious than a common cold. If every young man were informed of the havoc wrought by this disease alone in three directions, namely, blindness, pyosalpinx, and Bright's disease, many of them would avoid disaster. Not all, of course, for youth is a natural gambler when it comes to taking chances. It is no wonder if well-informed parents give their

daughters in marriage with fear and trembling. I often question whether our colleges, lay as well as medical, could not do more than they are doing in spreading information among young men on this subject.

#### The Treatment

When we come to the treatment of gonorrhea in the female, we at once find a bewildering difference of opinion. Nearly every doctor has his own pet method of procedure, some of them simplicity itself, many of them complicated and fraught with much suffering to the patient.

Among the remedies in use, we may mention boric acid, borax, hydrastis, zinc sulphate, zinc sulphocarbolate, potassium permanganate, bismuth subnitrate or the subgallate, silver nitrate, argyrol, protargol, iodine. But, there are many others. All of those named have their value, and it would, no doubt, be possible to carry through the ordinary case to a successful conclusion with any one of them; indeed, many cases would get well with no other treatment than rest and cleanliness. In fact, I have not a shadow of a doubt that many cases are prolonged and that unnecessary suffering is being caused by overtreatment, and that the danger of complications is thereby increased.

So far as my own preference is concerned, if I can have boric acid, potassium permanganate, and argyrol, I am willing to dispense with all the others. To my mind, the most important elements in the treatment of an acute case of gonorrhea are: first, avoidance of irritation, especially in the acute and painful stage; second, frequent cleansing; and, third, the use of nonirritating antiseptics in the acute stage and stronger ones later, if indicated.

I should much prefer perfect rest in bed for every case, but this often is quite impossible, because the trouble must be kept a secret. The diet should be light, the bowels be kept open and the urine bland, using, for the latter purpose, potassium acetate, well diluted, to control the acidity. For a vaginal douche, I prefer a saturated solution of boric acid, used every two to four hours with a fountain-syringe. If the introduction of the nozzle, which should be long and smooth, causes much pain, it should be well lubricated with olive-oil or white vaseline. If the irritation continues to increase, the syringe must be used less frequently or abandoned for a time, employing only external irrigation.

After the acute symptoms begin to subside, the boric-acid solution may be continued as

long as improvement goes on. If progress comes to a standstill, it is well to change to a permanganate solution, used mild at first and increasing in strength, according to results. If there appears a tendency toward chronicity, it is a good plan to swab every portion of the vaginal mucous membrane every second or third day with a 10- to 20-percent solution of argyrol, using a speculum. By beginning at the top and gradually withdrawing the speculum, every part may be reached.

In cases of long standing and when there is recrudescence of a latent infection, I seldom use the boric-acid solution, but depend mainly upon the permanganate and argyrol. In a chronic case with little irritation, I have had good results from dry powdered boric acid. A speculum is introduced, a heaping teaspoonful or more of the boric powder is placed high up under the cervix, then a good-sized tampon of absorbent cotton (wool is irritating) is placed underneath it, to keep it in place. This may be left three days, until the boric acid is all liquefied, and the application may then be repeated as often as necessary.

The other remedies mentioned above all have their advocates, but some of them are too irritating for the acute stage and are likely to be used in too strong solution. One treatment that has been recommended in certain journals is, to paint the whole vaginal mucous membrane with full-strength tincture of iodine. I have not tried it, as it did not appeal to me theoretically, and some of the reports I have had from others have been unfavorable, ulceration of the vaginal wall and adhesions having occurred in one instance. The longer I treat gonorrhea, the more I am convinced of the superiority of bland and nonirritating applications, for both sexes, over the stronger drugs, which often are responsible for complications. Nature resents being treated roughly.

In treating this disease in little girls, vaginal irrigation should not, as a rule, be attempted, as the vagina is too undeveloped to use a fountain-syringe, while external irrigation gives good results. The cleansing should be frequent, and white vaseline be freely used to prevent excoriation. A vulvar pad should be applied in the intervals and the child kept in bed. If in some especially bad case vaginal irrigation should be deemed necessary, a very small tube should be used—no larger than a wheat-straw.

In very obstinate cases of chronic or latent gonorrhea, autovaccines may be tried. I have

seen some good results and also some failures.

The question, "When is gonorrhea cured?" is one of great importance. In view of all the facts, we are compelled to answer, "Nobody knows." But, we must decide upon some kind of a standard, inasmuch as we frequently have to answer the very practical and vital question, "How soon may the victim safely marry?" In answering this question, we are compelled to take a certain amount of risk, just as we have to do in all human affairs. If we make our prohibition too strict, our patients will disregard it (they often do, anyway), and, if we pronounce them safe too soon, they will blame us if disaster results. In any case, it is best to warn them of the uncertainty of a seeming cure.

To try and formulate a rule that can be followed as an approximate standard, I should say that after an acute case, when all macro-

scopic signs have disappeared, three microscopic examinations should be made at intervals of a month, then, if the results are negative, the patient is reasonably safe. In chronic cases and after the recrudescence of latent cases, this time may safely be shortened. In these, I have often depended upon three microscopic tests at intervals of a week and have had no reason to regard the rule as unsafe.

In conclusion, a word that is not gynecological. I want to protest against the custom of putting silver nitrate into the eyes of newborn babies. It is needlessly cruel, for, we have in argyrol a substitute that is equally effective and quite painless. If the doctor will put a drop of silver-nitrate solution into his own eye, he will understand why the German name of the drug is "hell-stone." Silver nitrate is a "back number." Wake up!

[To be continued.]

## The General Practitioner in His Relation to Practical Psychiatry

By LEON E. DUVAL, M. D., Washington, D. C.

Government Hospital for the Insane, Washington, D. C.

*EDITORIAL COMMENT.*—Doctor Duval very kindly has offered to answer any questions regarding problems treated in this and other papers, that may be asked of him by readers of "Clinical Medicine." Such letters may be enclosed to us and we will forward them to Doctor Duval. His answers will be published from time to time in "Clinical Medicine."

[Continued from May issue, page 370]

### The Precox Personality

WE WILL begin by considering the mechanism of the dementia-præcox type of reaction. Normally, a person develops, from childish interests, ambitions, and conceptions, through gradual stages to adult interests and ambitions, with creative and useful applications of his energies. He has enough "vital force," or whatever one chooses to call it, to carry him through these stages and to maintain him at the adult level of intellectual and mental functioning power, after he has reached it.

The precox case, on the other hand, begins life with insufficient power to carry him on after he has reached the adult stage. He may not even reach adult development in the psychological sense—while he may not be a mental defective, as we ordinarily think of the term, his views of certain life-problems, especially the sex-problem, are likely to be childish. Frequently he develops normally

through all the stages and for a time manages to meet the world halfway.

Sooner or later, however, the larger problems of life present themselves, and then his poor endowment begins to manifest itself. He is unable to keep up an efficient battle with his problems and, what is worse, does not care to try, preferring the easier way, the thing which brings content with no tiresome effort on his part. He solves his problems by going backward over the path of psychological development toward the ambitions, ideas, and pleasures of his infantile and childhood life. That is, he goes back to the time when he had no responsibilities, when someone else solved all his troubles for him. Just how far back he goes depends upon the factors in the individual case and the relative deficiency of "vital force." This slipping back toward the infantile type is known as introversion or retrogression and is a type of mental reaction that indicates serious difficulties which the individual is incapable of solving satisfactorily. This, then, is the



mechanism of the changes of the personality which we observe in this disease.

Those individuals who develop dementia præcox are prone to be of the type of personality known as "shutin." In his normal state, before the disorder manifests itself, he tends to be seclusive, retiring, caring little for social life or companionship; he tends to evade responsibility as much as possible, and as a rule does not become especially efficient. This does not mean that these people are not intelligent. They may be very bright—and among these undeveloped precox cases there are numerous child prodigies, while many of them often become successful in various capacities. I have seen the disorder develop in army officers, physicians in the medical corps, and in others of equal attainments. But, inquiry into these men's makeup showed that they were of the shutin type, or alcoholics, or exhibited other abnormal tendencies. Sooner or later there is bound to be a cropping-out of abnormalities sufficient to attract attention to the fact that they are not normal mentally.

#### Manifestations of the Precox Type

The ways in which this psychosis may begin are almost numberless. The onset may be gradual or sudden, and it may resemble almost any other type of psychosis. There is one feature, however, in most instances, that is not seen in other psychoses and is characteristic of this disorder. I refer to the lack of naturalness. Between any given situation and the affective (emotional) response, there is not a natural relation in such a defective: he tells you with a smile that he is about to die a horrible death; the death of a loved one produces no apparent emotional result. In other words, the emotional reactions are not the same as our own would be under the same circumstances. I shall not attempt, in a paper of this limited length, to describe the various manifestations of this disease. I have pointed out the makeup of those in whom it develops.

Next let us consider some of the precipitating factors.

Unsatisfactory solutions of family and personal problems, more especially of the sexual problems, are at the base of nearly every case. These individuals include a large percentage of the homosexuals, but also many of the other sex-perverts, usually, however, not developed to the point where the perversion is indulged in. It is manifested in symbolic forms in their dreams, actions, and the specific features of their psychoses.

Very frequently they do not recognize in themselves the tendency to sex twists; these exist only in their subconscious minds, from which latter they exert a profound influence upon the individual's entire life. Sooner or later these perverted instincts break into the conscious mind, perhaps in the form of symbols.

There are two tendencies in such an individual, pulling in opposite directions, and between them the conflict is a powerful one. The primitive, suppressed, unconscious, unconventional desires conflict with conventionalized recognized conscious desires, which latter are the product of his social training and environment. These conflicts occur in all of us at times, but, we always suppress successfully those desires which conflict with our social training and try to live, not as we really feel a desire to do, but as our fellow men would have us. In the precox, the suppressed desires win a victory, partial or complete, and there is frank satisfaction of the impulses, manifested either in conduct or in symbolic mental reactions.

As an example, a young man with unrecognized perverted sexual tendencies married a young woman who was rather frigid sexually. She was deeply in love with her husband and submitted to his desires as long as they took a normal direction, which they did for several years. He was a hard-working young man, but his wages were not high, and for a time he was in stringent circumstances. At length prosperity came; but, at the same time, a desire for sexual satisfaction in abnormal ways became manifest, and to these the wife would not submit. As a result of this antagonism, there became manifest a severe psychosis of the paranoid type, and quite hopeless as to any probability of eventual cure.

This case illustrates the manner in which this type of psychosis may begin. Only the wife's unusual frankness with me gave me the clue to the real basis of the psychosis, for, the patient did not admit any abnormal desires. As another feature, these patients are not frank and if they recognize their problems at all will not admit them. Herein lies one great difficulty in trying to help them. Instead of frankly meeting the problem, they put it aside altogether by slipping backward into earlier periods of their lives, where problems did not exist, where there was no troubling censorship upon their satisfaction of their desires, where responsibility was a thing unknown to them.

In every case, there is a definite developmental level at which the individual can com-



fortably exist and meet the requirements of that level. The difficulty lies in the fact that the world expects him to exist at a higher level, and attempts to do so always spell disaster.

The precoc individual does not present a wholly hopeless prognosis in every case. Granted that his developmental level is high enough, and that it is possible by psychanalysis or other methods to determine his problems, and that he can solve these problems or "sublimate" properly, it is entirely possible for such an individual to return to the world of men and become an efficient social unit. Unfortunately it is only in an occasional case that this is possible. Many go back into the world for a time, but most of those who thus do go back sooner or later meet situations too difficult for them to vanquish, and the result is, another outbreak of the psychosis, and with a less hopeful prognosis.

The general practitioner's part in this problem is, to recognize those who are potentially of the precoc type. Once recog-

nized, it is his difficult task to prepare these unfortunates to meet the problems of life, and so far as possible to keep them away from (to them) insoluble problems. They are to be taught to recognize their problems and to surmount them. When a person shows precoc tendencies, it is best to put him into the hands of a psychiatrist, for, bungling handling of such a case does infinite harm. One factor for preventing the cropping out of problems is, the frank discussion of sexual life and putting the individual into a correct frame of mind on this subject. Early recognition of these cases offers the only hope of really beneficial treatment.

In the foregoing, I have only briefly sketched this problem. I advise the reader to acquaint himself fully with this disease and its manifestations, using some of the more recent textbooks on mental diseases. Every practitioner is bound to meet these cases sooner or later, and ability to recognize them and to apply proper treatment is a duty to his clients as well as a tribute to his professional ability.

## Summer Diarrhea

By V. E. LAWRENCE, M. D., Ottawa, Kansas

*EDITORIAL COMMENT.—At this time of the year, it would be a serious error to neglect the needs of our patients, and especially of our little ones, in the excitement and preoccupation occasioned by the political situation and by the fact that we as a nation are engaged in war. Summer time is upon us and summer diseases soon will make their annual appearance. Doctor Lawrence gives some excellent advice which may well be followed.*

PROBABLY because the good editor of this journal knows that there are some doctors who are so busy that they have not time to consult recent authorities and also because there are others who are so indolent that they do not keep up a speaking-acquaintance with their textbooks and medical journals, it is that he has requested me to contribute something on summer diarrhea, in the hope that it will be useful to both of these classes of subscribers. There will be but little original about the article, unless what is said regarding heat may, to some degree, be so named.

To protect both the well and the sick from cold, is not so very difficult a matter. Good houses, good clothing, and plenty of fuel will overcome cold, and even the poor may be so well clad as to be at least comfortable.

But, to resist the discomfort and the depression of excessive and long-continued heat, is a much more difficult matter. The rich may flee to the mountains. However,

only comparatively few can afford this. On hot days, everybody's house is hot. The electric fan may drive away a part of the discomfort, yet, after a long hot day followed by a night only a little cooler, and this kept up for sixty to ninety days, it is bound to tell upon the vitality and resisting-power of the weakly. This is especially so where the heat is accompanied with moisture. I wish to emphasize this point. So far as I can put my hand on the textbooks, I find almost nothing said about it. It is a matter of much importance in connection with summer diarrhea.

It need scarcely be said that diarrhea is much more prevalent during the hot season. The books emphasize the statement that the prevailing causes are unwholesome milk and other animal foods (deteriorated by heat) and also the much greater use of vegetables and fruits. This statement doubtless is true, and these may be leading factors. Nevertheless I feel sure that heat constitutes

an important element in causing diarrhea in persons of whatever age, and especially in the children. And this is not confined to those who live in unsanitary surroundings. But, what can we do for these patients?

#### The Control of Temperature

Reduce the temperature, and the thermal cause is removed. But, how can this be done in the ordinary home?

In some of the southern and middle-west states, the mercury not infrequently, in the hottest days, reaches 104 to 112 degrees. The writer has found that by closing all doors and windows at 6 in the morning often the house at noon and up to about 4 o'clock is 20 degrees cooler than it is outside. This, both to the well and the sick, is a decided gain. However, this can be done only in rather large and two-story houses; for cottages it is not advisable, because the heat from the roof is too great to allow of the draft being shut off. In all houses, however, moist sheets hung up will reduce the heat. A wet sheet may be placed over the bed or cradle of the child, but should not be allowed to come in direct contact with the patient. Furthermore, frequent tepid baths are grateful and useful. The bedroom of the sick should not be allowed to have communication with the hot kitchen.

I know of no more foolish and prevalent beliefs than that babies should be more warmly dressed in the summer than should their older brothers, sisters, and parents. Nothing can be more unreasonable, damaging, and cruel. A light shirt and dity is enough. Put the child in the hammock.

To be called to the cot of a helpless child too young to talk and too small to resist, and find it surrounded with flannels and perhaps buried in a pillow, while the little one is crying in distress, is a reflection upon the intelligence of even the most unintelligent. And this is no uncommon occurrence.

During all my professional life, I have tried to convince my patrons that the capacity to produce animal-heat is greater in the child than in the adult. That the child should be dressed even lighter than the adult. And, yet, every summer I am called to see what is the matter with the babe who has been crying for two or three days, when the torment—distressing to think about—was to be found in the fact that, while the mother was going about in a mother-hubbard gown and one slipper, her child was being tortured in the midst of winter clothing and perhaps,

in addition to this, was sunk in a cradle, with no possibility of the slightest movement of air coming to the little sufferer's relief. For the sake of humanity, I hope that every doctor will sedulously educate his people in this matter.

Summer diarrhea, I have come to think, sometimes is the bowel's "night sweat". Just as the debilitated skin in the relaxed condition, when there is the normal relaxation of sleep, permits perspiration to escape in abnormal quantities, so the mucous membrane of the intestine, in its debilitated and relaxed condition, permits a summer diarrhea to occur. And heat alone may be sufficient to cause the necessary debility.

It is important to remember that acetoneuria often is present in diarrhea, especially in that of children. Legal's test for acetone in the urine is a good one.

#### Some Therapeutic Measures

The early authors knew that alkalis were useful in such cases, although they knew nothing of acidosis. The following prescription, which is half a century old, is useful, although I think the quantity of sodium carbonate might be increased with advantage.

Sodium carbonate.....	dr. 1
Sodium sulphocarbonate.....	drs. 3
Tincture of hydrastis.....	drs. 6
Aromatic syrup of rhubarb,	
enough to make.....	ozs. 6

Dose for an adult, one tablespoonful every two to four hours, until normal stools appear. For children, one teaspoonful. Sodium phosphate should not be forgotten in this connection.

Imperfect digestion, both stomachic and intestinal, is caused by general functional debility and by improper foods.

In my own practice, I have found that predigested milk is next to mother's milk for the infant and valuable in all ages. A good and pure milk must be chosen. To this, saccharated pancreatin is added, together with a few grains of sodium bicarbonate. The milk is heated to 100° F., by being placed in warm water, then the above ingredients are stirred in. The milk will thicken in about ten or fifteen minutes and then become slightly bitter. It should not be digested too long, and fed before this bitter taste develops. Owing to this change, it cannot be fed from the nursing-bottle, but must be given with the spoon. The alteration is unimportant and objectionable only to the sense of taste.

The bowels must be kept cleared of objectionable feces, such as undigested and decom-

posing foods. Disinfectants should be used to keep them normal. Probably in many such cases castor-oil is one of the best initial purgatives to give. The question of food is a difficult one and will tax the doctor's skill as well as his patient's.

In fulminating attacks, the bowels usually are well emptied before the doctor arrives, and purgatives then are damaging and most fatal. In fact, any case may reach the stage when purgatives only add to the patient's danger. The doctor must recognize this and be ready to resort to opiates, to check undue and exhausting watery evacuations. For adults, the best for this purpose is morphine, given hypodermically. In the case of the aged and small children, however, this must be used with great care, as both ages respond promptly to the narcotic effects. Paregoric for infants and deodorized tincture of opium for the aged are best. Copper arsenite in minute and frequently repeated doses is a most valuable disinfectant. Bismuth subnitrate is useful for relaxation, with too free discharges.

The colon may, with safety, be irrigated with warm salt-solution.

Forchheimer's "Therapeusis of Internal

Diseases (vol. ii, p. 329) contains the following—quoted in full, as it is too valuable to omit:

"The general outline of treatment in children, which I have employed for a great many years, is as follows:

"(1) When possible, rest in bed until all symptoms have disappeared. (2) Food to be eaten warm. No milk, but Liebig's or Mellin's food, eggs, soups, beef-tea, cocoa or racahout. (3) Bowels should be kept empty of hard masses or collections of feces. Every patient should receive a dose of castor-oil as soon as the diagnosis is made, and this should be repeated whenever physical evidences (palpation and percussion) show that masses exist in the colon. (4) After No. 3 has been carried out, and not before, opium in some form or other should be administered. (5) Externally, poultices are very grateful. (6) Enemata of cold water should be employed in the beginning. As the disease progresses, rectal irrigations with warm water or oil are very grateful. Small quantities of warm water injected into the rectum after each stool give great relief, in addition to providing a more efficient emptying of the bowel. In this stage, colonic irrigation is valuable."

## Success in Medicine

By A. L. BENEDICT, A. M., M. D., Buffalo, New York

Consultant in Digestive Diseases, Columbus Hospital; Attendant, Mercy Hospital;  
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[Continued from May issue, page 366]

### Executive Success

THERE is no close relationship between fitness for medical study and practice and a fitness for running a medical institution or society, and it is merely accidental that the two qualities occasionally are found combined. Hence, we find a natural tendency to allow the medical profession to be run by men who are not especially identified with medical science and practice. When, as in most of our larger organizations, the entire business management is left to committees or to a body of delegates, the mere conflict of appointments tends to widen this breach. On the whole, it seems that the "machine" government of medical organizations is desirable, because it frees the mind of the strictly medical man from responsibility and leaves business matters in the hands of those most interested and most capable.

And, really, genuine cause for complaint is rare. In many organizations, it is the pre-

cedent to elect certain officers merely as a token of honor to those already successful and influential, and it is tacitly understood that the one thus honored shall not interfere with the actual management. Occasionally we wish that he might usurp some of the active management.

It is easy to overthrow "ring rule." For instance, a certain society, some years ago, surprised itself by electing an opposition candidate. The men accustomed to controlling its affairs were frankly astonished and grieved. One of them said to me, "I don't understand it; everything seemed to be going on so smoothly." And it had to be pointed out to him that this smoothness of working was the sole cause of the ruction. No one had any particular complaint, much less antagonism, either to the very innocent ring or its candidates. The majority of the members were perfectly contented to let the ring carry on the society's work, and they knew—or thought they knew—that it was no use even to bother about casting a vote.

However, a minority, who just wanted to do something for themselves—like the pampered rich child who escaped from the automobile and ran around in the mud—got together, attended in a body and elected their candidate easily.

Now, there was no reform to be accomplished beyond the mere assertion of democratic ideals, and no power to carry out a reform if one had been needed, and, so, in a short time, matters got back to their normal condition of the *status quo ante*.

To some degree, in the control of medical societies, and still more so in the management of educational institutions, hospitals, dispensaries, and the like, executive success has been turned to personal uses. Success of this sort ultimately is a disgrace, not an honor, and, in many respects, a higher ethical standard is desirable.

#### Intellectual Success

We often recognize that a man is well qualified scientifically to practice medicine, or even to follow it as an art, and, yet, find that he does not achieve the practical degree of success, either financial or in professional standing, that logically is to be expected. It is a general rule that original investigators in any line do not get their logical reward, and in medicine it is impracticable to provide for the adequate financial recompense of research-workers. Such men, as well as the profession, realize this financial handicap and make allowances for it.

The highest degree of reputational success, as well as financial, usually is obtained by men who do not create, but who adopt new information. Even with this qualification, and eliminating also to a large degree the mere matter of earning-power, it is difficult to explain the discrepancies of reputation. Probably it is partly dependent upon the law of chance. There are more physicians than can obtain either an adequate income or a sufficient amount of experience and work to assure them professional renown.

Success depends upon attracting a good deal more than the average size of clientèle, and this ability to get material for either financial or reputational success depends upon a good many factors—including the law of chance.

It is very seldom that a man stands high in the profession without deserving his reputation, but it is a very frequent occurrence that men apparently equally worthy or superior are relatively failures. In fact, nine physicians out of ten are failures, in the sense

that they do not possess the ability to create the opportunities for developing the real powers they are possessed of. But this is even more frankly recognized in business. The average business man does not worry half as much about the excellence of his goods or the means of pleasing his patrons as he does about the matter of getting those patrons by advertising.

So, too, the average physician of high grade is competent, he satisfies his patients, but he lacks the power of attracting enough work to suit him and to give full scope to his native ability. It is a curious paradox that, both in and out of the profession, we find men who have this drawing-power, without what is called magnetism, without rendering especially good services, without even deluding the customer or the patient into thinking that he is being satisfied.

There is one item in regard to intellectual success which should be impressed upon the minds of young men. This is, the falsity of the adage that high scholastic standing is incompatible with practical success. It cannot be denied that a proclivity for certain impractical forms of study unfits one for practical medical work, but this proclivity not only interferes with life-work but with actual medical study. I remember distinctly two highly educated (in the academic sense) and scholarly medical students who were pointed out by their associates as unfitted for medical practice, but they could not even pass the examinations for the medical doctorate.

But, so far as medical undergraduate study is concerned, the better students usually have been successful and the poorer students unsuccessful in their after life. This does not imply that small differences in percentage rating are significant, or that men have not made up for mental slowness, inadequate preliminary training, idleness due to immaturity and the like, or that opportunities ascribable to factors over which the individual has no control may not overthrow the balance in favor of medical scholarship in college.

An important fact in attempting success is, to free one's mind from the idea that all depends upon extraneous details, as is commonly held. One of the most successful physicians the country ever has produced was of insignificant build, youthful appearance, with a mustache that never passed the budding-stage, and who strongly suggested devotion to social functions rather than serious work.

Whiskers, baldness, apparent or real maturity or early senility, large features, serious

demeanor, a silk hat and Prince Albert coat at untimely hours, and all such externals have, in my observation, not been conducive to success, neither have they prevented success. The same may be said of their opposites. Two of the most successful general practitioners that I have known smoke cigarettes almost incessantly; some of the most notoriously immoral men have been highly successful, and, so, too, have been many physicians who obtruded their morality and their religion on every possible occasion.

Bearing in mind Oliver Wendell Holmes' epigram about the physician who made the fatal mistake of being polite to his patients, one can explain the success of those who are rude and insulting to their clients, even to the degree of coarseness in addressing refined ladies. But before one has time to decide upon this course of action for himself he meets some great medical man who is genteel, soft-voiced, and almost effeminate in manner. Personal vigor might be supposed to appeal to the laity, but some of the greatest successes have been achieved in spite of chronic invalidism.

All this may be disconcerting to the young man desirous of obtaining the clue to success. In fact, there seems to be no safe rule to follow, and it is especially unfortunate that there seems to be no way to decide how far perseverance can be depended on to lead to success, or when one should determine that a given course will prove unsuccessful and that

economy of effort should lead to a different line of activity in the medical profession.

At the risk of seeming heterodox, I would advise taking any opportunity that reasonably assured moderate success, of holding on to any reasonably successful location or position, but of making a change that was distinctly more promising rather than hanging on for the success to be expected in theory from determination and perseverance and, in the early years, of preferring the immediate advantage of more money or more work to the remote advantage of perfecting one's self in scientific knowledge by securing more time through cutting down the amount of direct professional labor of a routine nature.

To be honest, it should be confessed that I myself have not followed this line of advice very closely and that, so far as I can judge, I should have been no better off if I had followed it in each of the critical opportunities presented for a choice.

On the whole, the best kind of success seems to be that secured by following one's own bent and—in no self-indulgent sense—one's own inclination, and in refusing to be distressed if in one way or another, or in all, someone else is more successful. In the long run, it makes little difference which molecule of water is in contact with the air and which with the bottom, and, probably, if we could imagine them conscious, the happiest ones are those neither next to the mud nor involved in problems of surface tension and liable to evaporation.

## Food Economics

By A. T. CUZNER, M. D., South Jacksonville, Florida

**I**NASMUCH as there is a shortage of food supplies throughout the civilized world and, further, the continued wastefulness of armies, and this to be still further aggravated by other nations about to enter the arena, there is an urgent call for the economical use of such staple foods as we still can command.

The late Doctor Gaillard, editor of *Gaillard's Medical Journal*, remarked to the writer many years ago that the average practicing physician was not well informed on foods and their nutritive and economic value. Believing this, the writer presents the following data for consideration.

Grain is generally considered, and so classed, as the staff of life—wheat occupying the front rank. There now being a shortage

of this king of grains, it behooves us to use it as economically as possible.

Again, there are over one-million dollars' worth of grain used, in the United States, in the production of alcoholic liquors, that possess no food-value whatever, as such. This has been demonstrated more than once. Hence, by law, such grain should be liberated from the fell use to which it is put, and be diverted to its proper utilization as food.

Now, this monarch of grains, in the form of white flour, is more expensive and of less nutritive value than is corn-meal. This is owing to the difficulty of separating the gluten of the latter from the rest of the grain.

The history of wheat carries us back into the dawn of authentic history. Its superiority



in feeding-value consists, first, in its great palatableness and, second, in its larger proportion of gluten, and the role the latter plays in breadmaking. This gluten is mainly located under the husk, or bran-coat. At least one-half of this gluten is lost in the milling-process, to obtain a white flour. The mineral elements, especially phosphorus, are found in greater proportion in this gluten than they are present in the rest of the flour. The whole wheat-kernel contains, according to kind, from 25 to 30 percent of gluten. Southern wheat contains the larger percentage. Our best white flour contains about 12 1-2 percent of gluten.

Maize, when ground, cannot readily be denuded of its gluten, hence, has a higher feeding-value. Besides this, Indian corn is not largely exported, and, in addition (according to Mr. Houston, our secretary of agriculture), there is no shortage of corn.

One advantage wheat-flour has over corn-meal we have just touched upon, namely: the power of wheat gluten to make lighter bread than the gluten of other grains. This is due to its property of absorbing so much water in breadmaking, swelling up and becoming very porous. Thus, we find wheat-flour makes a lighter bread than does corn-meal or that from other grains.

Corn-meal, as stated above, has more nutritive value than has white flour, owing to the fact that the gluten cannot readily be separated from the rest of the meal in the grinding. However, its proportion of gluten to the whole grain is slightly lower than that of wheat. It carries more oil than does wheat.

Now, as the mineral elements of the grain are mainly located in the gluten, under the bran-coat, the users of white flour are compelled to eat more meat or resort to mineral elements in drugs, provided by the doctors, in the shape of medicines. Exclusive users of white flour suffer from bad teeth.

The early settlers of America mainly used corn-meal as bread, because of the greater ease of cultivation over wheat, and its larger yield.

Corn-meal, sweet potatoes, and pork won the American Revolution.

Rice, which is most used in warmer climates of the United States, is denuded of most of its gluten, hence, is not as nourishing as corn-meal. Were people to partake of rice as do the people of eastern countries, it might take the place of wheat. However, when reinforced by egg, sugar, and milk, it is a very nourishing and toothsome food.

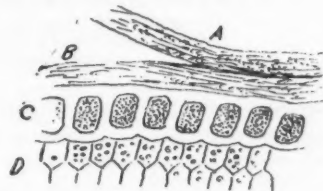
Food-taking must be in accordance with the climate and occupation of the people of

any country. In warm climates or seasons, people should indulge less in meat and depend more on fresh vegetables and fruits.

Just here, it may be said that in his experience of 54 years of practice the writer has found that a large portion of the diseases he has had to treat were, primarily, due either to over- or to underfeed; in other words, to malnutrition.

Now as to the province of feeding different food-materials. The starches and sugars (carbohydrates) furnish heat and energy—correlated forces.

Sugar is a most excellent food when energy is to be liberated rapidly and with the least tax on the digestive system. During the present European war, cavalry-horses recover health and energy when their coarse grass or



SECTION OF BRAN-COAT

- |                    |                      |
|--------------------|----------------------|
| A. The outer coat. | C. The gluten cells. |
| B. The inner coat. | D. The starch cells. |

hay is sprinkled with sugar in some form. Were the writer called upon to supervise the feeding of an athlete about to engage in a great expenditure of energy and endurance, he should charge him with a diet consisting exclusively of some form of sugar. If, when the craving for a drink comes on in one who is accustomed to alcoholic beverages, he were to partake of sugar instead, his craving would be satisfied.

Fats and oils (hydrocarbons) are great heat producers; hence, when taken of too freely as food in hot climates or during summer months, they clog the system and make work for us doctors. In northern climates, the loss of heat caused by extreme outside cold calls for fat as food.

Now as to fresh vegetables and fruits as food. If the biblical records reflect truth, then we find that the first food of man consisted of fruit and vegetables exclusively. According to Darwin, our arboreal forbears lived on fruit only.

But a few weeks past, a German warship was compelled to sneak into port, on account of many of its crew dying and a large number sick, for lack of fresh vegetables. During the late unpleasantness between the states,

during the sixties, the writer's brother was serving in the northern army in Virginia. Many of the privates were afflicted with a persistent and intractable dysentery, which the doctors could not control with drugs. Some of the local farmers—on the sly—sold to certain of the privates fresh vegetables, such as onions and cabbage, and those men got the better of their complaint.

As this paper is not for the purpose of teaching cookery to my brethren, but, rather, to call their attention to the necessity of teaching their patients a better and more

economic dietetics than they have been practicing, we will not burden this article with cooking-recipes. We will, however, give one recipe, tested by your editor-in-chief while in the South, and it is this:

If a batter be mixed, consisting of 1 pint of corn-meal and 1-2 pint of white flour, to which are added 2 eggs and a cup of milk, the necessary salt and baking-powder, and a spoonful of sugar, the mixture placed in gem-pans and baked in a quick oven for about twenty minutes, the result will be very tasty.

## What the General Practitioner Can Do in the Treatment of Chronic Diseases

By GEORGE F. BUTLER, M. D., Kramer, Indiana

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[Continued from April issue, page 284.]

### Chronic Gastritis (Chronic Gastric Catarrh, Chronic Dyspepsia)

THE treatment of chronic gastritis will be considered under four headings, namely: (1) General. (2) Dietetic. (3) Medicinal. (4) Mechanical.

*General.*—The general welfare of the patient must be considered. Inasmuch as constipation is present in the greater proportion of the cases, exercise is an important factor, and this can be obtained in many ways. Walking can be indulged in by almost all, but, when possible, it is better to have the patient play golf, as walking then becomes a pleasure; also, horseback riding as well as rowing are at the command of many; but all should be done in moderation. Then there must be regularity in the time of eating. The calls of nature should be given prompt attention. These patients should be instructed in the proper methods of eating and drinking. Above all, the food should be well cooked, well masticated, and never bolted, as so often is done.

Mouth hygiene must be given the place it demands, for, many a chronic catarrh of long standing has been relieved by referring the patient to the dentist. A mouth foul with pyorrhea or uncleanly from inattention will cause prolongation of a catarrhal condition indefinitely, regardless of all remedial agents. The sleeping-room should be well ventilated. A cold sponge-bath every morning produces a very beneficial effect. In the morning before

arising, the patient should execute manual massage over the stomach and abdomen and also certain gymnastic movements.

*Diet*—The first step in the dietary is, to cut down the proteins and increase the carbohydrates, starches, and fruits. Unless malnutrition is extremely marked, it is not only possible to keep up the patient's weight, but to increase it very materially. In extreme cases, it may be impossible for the patient to assimilate such a diet. Then he should begin with semisolid or even, in some cases, liquid diet. At times, one even must push the proteins and fats. However, this rarely is necessary, since the vegetables can be given in such a way that they are accepted without inconvenience. Only in extreme cases, is it necessary to feed oftener than three times a day. In moderate cases, meats can be eliminated entirely, also eggs and milk, because of their large proportion of protein. These patients get a considerable amount of proteins in their meat-broths, but not to the extent that meat, eggs, and milk would furnish them. They should be put on a diet about like this:

Cereals: cream of wheat, rice, corn-meal, mush, and oatmeal; the latter sparingly, and not at all unless cooked at least three or four hours. Shredded-wheat biscuits are allowable.

Broths: mutton, chicken or beef, but preferably soups such as those of potatoes, tomatoes, peas, and celery. Vegetables in the great majority of cases can be taken as they are ordinarily cooked, but, should any

difficulty arise, they may be given in the form of a purée. Such vegetables as spinach, lettuce, raw cabbage, and asparagus are especially valuable, owing to their action upon the intestinal canal. Bacon is the one form of meat that is allowable, owing to the large amount of fat contained. Butter and cream should be taken in quantities, for the same reason. Macaroni and spaghetti are permissible and in some cases really take the place of the meats.

For drinks, buttermilk, kumiss, and occasionally milk, and weak tea are recommended.

Stewed fruits, most of them are good, especially early in the treatment; later, raw fruits are permitted. Of the stewed fruits, apples and prunes are the best. To alternate with stewed fruits, stewed rhubarb, when in season, is excellent.

**Medicinal.**—Very little medicine is indicated in these cases, my experience being that they are of slight value. Since subacidity is present in all cases except the acid type, dilute hydrochloric acid suggests itself. This should be taken after the method of Leube or Osler, in large doses, beginning with 2 mils (30 drops), increasing to 4 mils (60 drops) or more, and taken thirty minutes after each meal, well diluted with water and sucked through a glass tube (in order to protect the teeth). The teeth should be cleaned immediately after the acid is taken.

For a bitter stomachic, an excellent prescription is the following:

Tincture of nux vomica . . . . . drs. 5  
Compound tincture of cinchona . . . . . ozs. 2  
Compound tincture of gentian,  
enough to make . . . . . ozs. 4

Label: A teaspoonful in water three times a day before meals.

To this can be added 1 ounce of fluid extract of condurango as a further stomachic, and, if constipation is present, 5 drams of aromatic cascara sagrada.

**Mechanical Lavage.**—It is not necessary to use lavage in every case. Many times I lavage only long enough to cleanse the stomach of mucus, using preferably a mild solution of silver nitrate, beginning with 1 : 10,000 and gradually increasing to 1 : 5000 or even to 1 : 2000. This is to be used in the following manner:

Take two Ewald aspirator-bulbs and fill one with the solution, leaving the other one empty. The patient first drinks a glass or so either of plain water or of a bicarbonate of sodium solution. This is allowed to remain in the stomach for a few minutes and is then aspirated. The aspirator filled with the

silver solution is then attached and its contents are expelled into the stomach. This solution is allowed to remain for a short time and then is aspirated. The stomach may afterwards be washed out with plain sterile water. Provided the silver solution is mild, this may be repeated every other day or on every third day.

For gastric lavage, a bicarbonate of sodium solution is superior to any other, although we may occasionally add hydrastis, milk of magnesia, salt or boric acid. The alkalis can be used in the following proportions, as given by Kemp: 1 or 2 ounces of milk of magnesia or lime-water to the quart of water. Normal salt solution, 4 mils (1 dram) to 1 pint of water. Boric acid 4 mils (1 dram) to the quart of water. I myself use the bicarbonate of sodium in the proportion of 4 to 8 Grams (dr. 1 to dr. 2) to the quart of water, at a temperature of 110° to 112° F. In dilatation, with retention and fermentation, the best plan is, first to lavage the stomach thoroughly with plain warm water, and to follow this by lavage with a solution of sodium salicylate .08 to 1 Gram (grs. 10 to 15) in the same amount of water. After this, medicated hot air is to be forced through the tube, using oil of cloves, oil of cinnamon, and menthol in hot water. This is soothing and cleansing.

Internally, I still use in some cases the intragastric hot-air-bag as designed by Turck and modified by Mack. However, I think the treatment directed toward the intestinal canal is of greatest importance. Here, colonic flushing is of the utmost value. Many cases of gastric catarrh, even of long standing, will improve very markedly when the intestine is handled properly, although-but little or no attention is given to the stomach.

The flushing to be employed is not the ordinary cleansing enema, but the water is used at a temperature as high as 120° or 125° F. Only a small amount of water is allowed to flow into the colon at a time, generally half a pint to a pint or until the patient complains of fulness or an uncomfortable sensation, when the irrigator is disconnected from the tube and the water allowed to siphon out.

This procedure is repeated until one or two gallons have been passed through. This stimulates the activities of the kidneys, liver, and skin, increases the peristaltic action of the intestine, relieves the catarrh by the local application of heat, and cleanses the colon. These enemas can be medicated, if desired, bicarbonate of sodium, physiologic salt solution, hydrastis, argyrol, and boric

acid all yielding good results. They should be given daily at first, then on alternate days, and finally once or twice a week for several weeks.

#### Chronic Atony of the Stomach

Our first attention must be directed toward the hyperchlorhydria, chronic gastritis, tuberculosis, and diseases of the heart, which are undoubtedly the etiological factors in many cases.

Chronic atonic conditions, such as chronic dilatation of the stomach, are improved by an abdominal supporter, such as the Rose plaster belt or the air-bag inside of an ordinary elastic supporter. This may prevent the atony developing into an atonic dilatation.

The bitter tonics are of value in these cases, for example, a combination of tincture of nuxvomica, compound tincture of gentian, and compound tincture of cinchona, given from fifteen to thirty minutes before each meal. Strychnine can be substituted for the nuxvomica and fluid extract of condurango can be added or a combination of any of these may be utilized. Should anemia be present, Bland's mass and arsenous acid make a good prescription.

If hyperchlorhydria is present, it is advisable to omit the tonics and in their place to use the alkalis and bromides. It is well to avoid medication for the constipation, whenever possible; but, when necessary, laxative salines, regulin or perhaps cascara sagrada are useful aids. With the diet here recommended, any stronger cathartics rarely are indicated.

Vibratory massage over the abdomen and spine is beneficial for increasing the muscular tonicity.

Lavage of the stomach is rarely indicated, but we always should employ colon irrigation. In fact, this in some cases is the principal treatment, especially if no organic lesion is present. This also is an important factor in treating constipation, which nearly always is present.

I have employed electricity, but never with satisfaction. The diet should consist of bland and easily digested foods; liquids should be taken sparingly, except water, of which the patient should drink frequently, but only in small amounts.

Vegetables and fruits are important, as they aid in lessening the autointoxication. The vegetables should be cooked thoroughly to a pulp or they can be given in purées. Such fruits as stewed apples, stewed prunes, especially the juice and pulp, are excellent. Meat is to be eaten sparingly, allowing only

a small quantity of rare scraped beef, a lamb-chop or chopped beef and cream. Cereals for breakfast are acceptable to nearly all the patients. The vegetables are especially indicated for the constipation. For dessert, stewed fruits, custards, and tapioca, with angel-cake and sponge-cake, are agreeable.

Changes of scene, outdoor life, and moderation in business affairs are important elements.

#### Chronic Catarrh of the Intestines (Enteritis Chronica, Chronic Enterocolitis)

The presence of diarrhea or constipation in this condition determines the method of treatment to be pursued.

The diarrheal type demands a quiescent stage. In the severer cases, the patient is required to remain in bed. The more moderate ones are treated as ambulatory cases, but all active exercise that calls for increased exertion is prohibited. Fright and exposure to the elements should be avoided. "Catching cold" has a deleterious effect on these patients.

The mucous colitis is found only in neurotic patients, hence treatment must be both local and general. Efforts must be made to overcome the neurasthenia and hysteria.

As soon as we are satisfied that the diagnosis is correct, these patients suffering from diarrhea are to be put upon a mild laxative—after first thoroughly cleansing the bowel with castor-oil—generally a combination of the phosphate, sulphate and bicarbonate of sodium, in equal parts, the mixture to be given in 2-Gram (1-2-dram) doses after meals. This may be varied by giving Carlsbad water, in some cases. Frequently in the milder cases no other medication is required.

Severer cases call for bismuth preparations, either the subnitrate, subgallate or salicylate, three or four times daily. I have used tannalbin with very gratifying results in some cases, and occasionally use it in conjunction with the bismuth preparations. Opiates are never to be prescribed, except in the most extreme cases of diarrhea. Salol and other intestinal antiseptics are of little value.

In the cases in which constipation is the predominant factor, exercise is of great importance. These patients should be encouraged to walk, play golf, ride horseback or row every day, and do it systematically.

Massage, manual or vibratory, is indicated. Have the patient, while still in bed, knead his abdomen gently with both hands, as a rule following the course of the colon, from the cecum to the sigmoid flexure and then

over the abdomen. A light cannon-ball may be substituted for this method, but, when properly done, the manual massage is better than either the vibratory massage or the use of the metal ball. Cold douches over the abdomen every morning following the massage aid very materially.

The use of laxatives and cathartics in these constipated cases is to be avoided; if needed, liquid paraffin or regulin should be tried first. If these are not sufficient, some of the cascara preparations, the aloin, belladonna and strychnine pill or castor-oil in large doses may be given, every other night for one month.

In both conditions, enteroclysis is indicated, as described under enteritis, to be used every

day for two or three weeks and thereafter as often as required when constipation is present. In addition to the daily enemas, which the doctor should administer himself, the patient should inject into the bowel from half a pint to a pint of sterilized cottonseed-oil just before retiring, and retain the oil over night. In many cases, this is sufficient to keep the bowel open.

If there is any indication of an ulcerative condition, the patient may use a 10-percent solution of argyrol, putting 15 Grams (drs. 4) into half a pint of warm water, letting the mixture remain in the bowel for fifteen or twenty minutes.

[To be continued.]

## Individual Initiative Not Desired

By GEORGE L. SERVOSS, M. D. Reno, Nevada

Editor, "Western Medical Times"

WE have it forced upon our minds, through the columns of certain medical journals, that we must not employ this, that or the other therapeutic agent, unless it has had the sanction of some few censors. No matter whether we have received results, and good ones, from the remedies that have been placed on the taboo list, they are not ours to employ and if we do use them it is at our own risk. Some of these self-appointed censors go so far as to say that we do not know results, even when we are face to face with them. These men tell us that we must not use proprietaries, for one reason or another, and that the doctor who asserts that certain of such remedies have worth is a heretic or worse. The same as to any medical journal.

The doctor is not supposed to possess a mind, or, if he does, that part of him is not supposed to be working. He must, if these few self-constituted medical magnates were to have their way, cease to cerebrare, absolutely. He must, if he would be within the inner pale, use only such agents as may have been approved by the coterie of "leaders." Any honest opinion that he may have he must "keep dark."

Not only does this court of last resort hand down such a decision but at least one leading medical college tells us that all drugs should be dropped; that they are worthless and have no place in the treatment of the sick.

### Deplorable Duplicity Found in the Profession

Will the doctors never rise up in their might and combat things of this sort? But, per-

haps they do not have to rise up in any such way. Perhaps they are just paying no attention to these paranoiac meanderings and are going along as of old and using whatever drugs they "darn please." Indeed, I know some men who publicly swear by the decisions handed down by this self-constituted court, in matters therapeutic. In their public utterances, these men tell us how bad are the proprietaries, how dangerous are hyoscine and morphine or some other drugs or combinations of drugs; but, quietly following up their prescriptions, I have found that they very frequently fail to practice what they preach.

Not long ago, I heard one of these dissimulators saying that the sulphocarbolates are of the "no-good" class, because it is impossible for anyone completely to clean the bowel, that no drugs of this kind should be employed, and that surgery, and surgery alone, could accomplish a cure. Within a day, I happened to see a prescription from this same doctor calling for the very thing that he had condemned so severely. Asked why he employed the sulphocarbolates he said, "I had a case of acute diarrhea and I have found that the combined sulphocarbolates almost invariably give me good results in that condition." But, he would admit nothing of this sort in public, and for the reason that this remedy is officially proscribed. So, another doctor, who has published a tirade against proprietaries, not long ago wrote for a coal-tar mixture which for a long time has been refused advertising-space by even the independent journals of good



reputation—a mixture which for years has been advertised direct to the laity. And I could go on multiplying examples of this kind, of doctors pretending to condemn the condemned remedies, while secretly prescribing or dispensing them in their practice.

#### Some Reasons for Therapeutic Nihilism

Long ago I reached the conclusion that those who are opposing the use of drugs know little about what they are talking. A good many of them are of the editorial class and do not practice general medicine to any considerable extent. They have passed out of the ranks of the workers and are simply consultants; consequently, they rarely, if ever, see a case from beginning to end and, so, have no idea as to the conditions with which the man at the helm has to cope. Many of the college professors are in this same class. They are not in the active practice of medicine, and, so, do not keep up with the times. Therapeutics, so they tell us, is not sufficiently scientific to compel their attention. They insist that there is nothing exact in drug medication and that we should pay more attention to other things. In the meantime, I presume, we should allow our patients to suffer, maybe die.

When I studied medicine some twenty or more years ago, we were given to understand that it was the duty of the doctor at least to give his patient relief if he could not cure him. We were taught that there were certain drugs and other things which when applied under certain indications would bring about these results in a very satisfactory percentage of cases. We were told to go out and view our patient and, if possible, to discover what ailed him and then meet the indications. In fact, one of our professors, in his last lecture to our class, said: "Boys and girls, you are not going to be able to make a complete diagnosis on the occasion of your first visit, in a good many instances, but, you are going to see things which you will be able to correct, even if you cannot tell what really ails the patient. Meet these indications, and then, perhaps, you will never be able to arrive at the diagnosis, for, your patient may have recovered before you get a chance for another visit." And this man was a successful practitioner, even if he was not "scientific." He treated his patients, not disease-names. He did not lose his individual initiative—not for a minute. I have always remembered those few words of his, and with the consequence that time and again I have failed of a complete diagnosis, and this simply because I found my patient

recovered the next time I called, if, indeed, I was not previously advised that another visit was not required.

#### One Reason for Decay of Initiative

One reason for the loss of individual initiative is the fact that so many of our teachers fail to tell us of the special indications for the use of drugs. They put great stress on diagnosis, but, when it comes to giving us any idea of how to treat a named disease, they fall very short, and the reason for this, I already have said, is, that they do not see enough cases in actual practice to know or to recognize therapeutic indications.

It is these men who tell us that we must not treat a fever, as such, but must know with what that fever is associated. They tell us that morphine is the only thing that will relieve a sore bladder, never having given hyoscyamine a practical trial, although it is superior for the purpose. They tell us to give an opiate for the relief of abdominal distress, also for the reason that they have never used the henbane alkaloids. The coal-tar derivatives, they say, are indicated for the relief of headache, and this because gelsemium has been placed in the discard. They do not know that gelseminine, in certain varieties of cephalalgia, will bring about relief, and this because they have never tried it. They simply do not know whereof they speak and rest entirely upon theory. Lobelia, having been introduced into medicine by a rather illiterate practitioner, has, for years, been on the taboo list; and there it remains, so far as the theorists are concerned, the men who never do much real practice of medicine. These men would destroy our individual initiative in connection with this drug, and that because it was not introduced by a "scientist." Echinacea is another drug which, suppressing our individual initiative, we should never employ, even though we may have seen satisfactory results following its administration. One could go on and on, down through the entire line of drugs and chemicals, and name one after the other that are taboo. But what is the use?

Here is an example of this kind that strikes me as most ridiculous. In the discussion of a certain combination of hyoscyne and morphine, for instance, we were told that it is a dangerous mixture, one which should never be employed; but, in almost the next breath, we were told that the dose of any one of the drugs of the combination is comparatively small. They told us that hyoscyne is a dangerous drug, and then turned right

around and told us that it is very similar to atropine in its therapeutic effect. They placed this preparation on the taboo list, but went right on prescribing morphine and atropine.

They have told us that hyoscine is not a hypnotic, and that because probably they have not once used the drug. By making this assertion, they have, in some instances of which I know, effectually destroyed the individual initiative relative to its use. But when I have examined into these examples of destruction of initiative, I have found the subjects to be men who are not in the habit of forming their own opinions. And this is true with regard to other drugs, also.

I am free to confess that empiricism very largely takes the place of science in the practice of therapeutics, but I insist that it is educated empiricism. What is science but the knowing of a thing? We who have used a certain remedy know what to anticipate when giving it in the presence of certain signs or indications. It is in our knowledge that satisfactory results have followed its use in a multitude of prior instances. So, we consider it just as scientific to employ a remedy of known efficacy in the majority of cases as it is to apply the knife. And then, too, surgery does not invariably produce anticipated results.

It is all very nice for a select coterie of gentlemen, even though without practical experience, to sit back and tell us what we must or must not do. It is all very nice to expect us to become their "office-boys" and obey their orders. But, we are too American to do anything of the sort. The American usually does his own thinking, and it is my belief that he of the medical fraternity is not unlike any other inhabitant of this great country. The doctor in the United States has, in the past, relied upon himself, to a

very considerable extent, and it is my idea that he will continue doing so for a long time to come, even after the self-constituted board of censors will have passed out of existence and been forgotten.

My advice to everybody is, to use any therapeutic agent which, under his observation has yielded results satisfactory to himself and his patients. Make your diagnosis, by all means; but, if you are unable to do so in the beginning and your patient is suffering, then go at it and relieve him with whatever remedy you may consider indicated. If you assume the individual initiative to that extent, I can see in what respect you will be a successful doctor, that you do not have to depend upon any particular name, but are one who treats his patients, and not diseases.

And, there is a good deal of "bosh" about this disease treatment. If you will go over any prescription-file, you will see that regardless of the named disease many doctors, even those of the "scientific" class, habitually utilize rather a limited number of drugs, and those in case after case, regardless of the diagnosis.

What is the explanation of this? O, well, an easy question to answer! Like indications very frequently occur in differently named diseases, and, after all, the doctor treats the patient and the indications presented. That is he does that if the results he gets are anything like satisfactory. The man that does not get results is the one who fails to depend upon his own individual initiative and who treats all cases of pneumonia in exactly the same manner, for the reason that someone high in authority has told him that he should. The man who forgets pneumonia and exercises individual initiative, to the extent of treating the actual conditions confronting him, is successful.

## AMERICA

By HENRY W. LONGFELLOW

Thou, too, sail on, O Ship of State!  
Sail on, O Union, strong and great!  
Humanity with all its fears,  
With all the hopes of future years,  
Is hanging breathless on thy fate!  
We know what Master laid thy keel,  
What Workmen wrought thy ribs of steel,  
Who made each mast, and sail and rope,  
What anvils rang, what hammers beat,  
In what a forge and what a heat  
Were shaped the anchors of thy hope!

Fear not each sudden sound and shock,  
'Tis of the wave and not the rock;  
'Tis but the flapping of the sail,  
And not a rent made by the gale!  
In spite of rock and tempest's roar,  
In spite of false lights on the shore,  
Sail on, nor fear to breast the sea!  
Our hearts, our hopes, are all with thee,  
Our hearts, our hopes, our prayers, our tears,  
Our faith triumphant o'er our fears,  
Are all with thee—are all with thee!

# Artificial Mucosa and Magic Lubrication

By ROBERT GRAY, M. D., Pichucalco, Chiapas, Mexico

**EDITORIAL COMMENT.**—*Doctor Gray's interesting articles were crowded out unavoidably, in several issues of "Clinical Medicine." We have received so many inquiries concerning them, and so much regret was expressed at their omission, that we shall in future print at least a portion of Doctor Gray's writings every month as far as possible.*

**W**HENEVER there chances to come my way something of extraordinary importance to the medical profession and to the personally very dear members thereof, I feel an impelling urge to speak out, whether in meeting or out of it.

The editors and readers of *CLINICAL MEDICINE* know that I ever am shy about recommending anything outside of my "chronic" faith in the active principles. My more radical departures from the beaten path have consisted in favoring the use of kerosene and of some coaltar derivatives and neither of these has put me to shame in the final home-run, although I have been finely abused for using such pernicious substances and claiming any merit for them.

The latest therapeutic transgression to which I must confess consists in my taking up the use of liquid paraffin. Of course, the medicinal use of this mineral oil is not a new thing, for, it has been in vogue under various names, such as, for instance, Russian oil, German white oil, and liquid albolene—the latter for a long time put on the market by a gilt-edge American firm of pharmaceutical chemists, although never pushed with sufficient energy to challenge my curiosity. But last year the announcements concerning stanolax, as also about liquid albolene arrested my attention to such a degree that I ordered a supply of 100 bottles of stanolax, in order to put it to the limit of a crucial test.

## A Personal Trial of Stanolax for Costiveness of Old Age

It has been frequently recorded, where my lubrications have crept into print, that I am a "crank" about testing on my own anatomy the physiological or remedial action of any new substance brought to my attention; and, as a matter of fact, the liquid paraffin did not escape this curiosity of mine. It also has often been affirmed by me that my life happily had been exempt from invasion by any disease. However, I must here confess that, as the years stole along beyond the four-score term, a hardening of the feces and a slightly, almost imperceptibly, increasing difficulty in expelling them were noticed by me; and this despite the use of

Metchnikoff's "elixir"—peace be to his ashes!—so that by and by my matutinal devotions in the closet lasted about half an hour, while something more of force of the abdominal press was called for than was agreeable.

So then, trying the newly arrived mineral oil (stanolax) on the d., viz., myself, I took a fully double maximal dose every day, but, for a week, no trace of any influence was manifest. However, on the morning of the ninth day I had to wend my way to the closet with something more than usual celerity; the evacuation being immediate and the most copious I ever saw from human being. The dry mucous and fecal matter had been softened and brought back to a semblance of more normal excrement. After that, I took one-fourth the previous dosage every night for one week longer, then quit.

Two months have elapsed since then and now half a minute is the time necessary in the closet, instead of half an hour. To be statistical, this represents a saving of fourteen disagreeable hours every month, time worth more to me personally than the cost of a hundred bottles. Should there be evinced a tendency to relapse, a few doses, I am convinced, will suffice again to overcome this unfavorable action, exactly as I have found in the treatment of several of my costive patients.

## Some Excellent Results in Practice

I knew a well-to-do old man afflicted with indigestion, costiveness, bleeding hemorrhoids, catarrh of the stomach and of the head, who bought a regular drugstoreful of patent nostrums, year in year out, seeking but never finding relief. However, in these unhappy days, neither patent nor legitimate medicines arrive in this belt, save what little comes to me; and to me, because I am requiring payments in the form of native rubber, once a year, and this keeps my American accounts somewhat patched up.

To this constipated old man I said that I very much sympathized with him, but that I believed I now had something that would do him good. I showed him a bottle of the stanolax, and he took to it like a cold kitten

to a hot rock, under the impression that it was some new patent medicine. I gave him the same dosage as I had taken, and the result was the same, except that it took twelve days. Then I taught him how to take a dose in the mouth and force some of it to penetrate the cavities of the head and then to let it slowly seek its way downward. The bland oil certainly entered every penetrable duct in the bronchials, respiratory organism, and alimentary canal. In addition I ordered him to inject a little into the rectum.

Now this man's digestion is fair, he is quit to his costiveness, hemorrhoids no longer feed nor annoy, while the respiratory catarrhal affliction has become so modified as to be tolerable. He still takes broken doses on three consecutive nights twice a month.

Another victim of indigestion and costiveness was treated similarly and after a lapse of one month and cheering relief he came telling me that he did not urinate at night half as often as formerly and with much less difficulty. I at once suspicioned the presence of prostatitis, although he had never before breathed of any urinary affliction. So, I proceeded to an examination. I found the prostate gland fairly ragged, with lumps and sags, inflamed and tender.

I got a few thimble-shaped stalls made of fine Red Cross lint-fiber cloth, and of a size the rectum would chamber snugly. I placed one of these stalls on the little end of a sperm candle of proper size, moistened it with the liquid paraffin and pushed into the rectum, where I left it for half an hour. This I repeated three times every other day. My object was, to apply a gentle, even pressure of the moistened fabric to the inflamed surface, thereby breaking up the lumps of the prostate gland, which undoubtedly contained pus.

Next, I took a bar of sealing-wax and trimmed one end of it to the shape of a properly formed suppository. This the man was told to moisten in the liquid paraffin and insert into the rectum every night, to give it some turns back and forth for a few moments, then thoroughly clean this contrivance after each use. In a month, the man did not have to urinate more than twice each night, which gave no inconvenience. This I regard as normal here, where the food is so largely liquid.

Several other adults were treated for indigestion and costiveness—without other complications—also with satisfactory results; save two inebriates, who were not benefited, and one inveterate smoker, who got no relief

until he abandoned his vice, when he began to improve at once. When this man is cured, I hope that the use of the weed, to which he will surely recur, may not provoke a relapse.

#### Negative Results in Clay-Eaters

My primary motive in ordering the stanolax was, to combat the anemia of clay-eaters; but, the shipment was made in early January and did not reach me till early in July, so that many of the anemics I hoped to save had died in the meantime. Of the children who eat dirt and in whom the mineral oil was tried, not one has been saved nor received even mere passing relief; on the contrary, they seem to die more quickly, the mucous lining of the intestine being destroyed by the sharp grit in the dirt, so that the partial cleaning effected by the oil offers a surface which new rations of the clay severely irritate and thus lead to the bad consequences.

Children who did not have this deadly vice of clay-eating, always have experienced prompt relief from anemia whenever there was blood enough to afford a reasonable foundation; although not one that had reached the dropsical stage recovered or even improved.

Inability to assimilate the low-grade food which even the more fortunate natives eat here is the source of the anemic affection that exhausts the blood and makes none. And such a disastrous state was engendered by the famine last year—a fatal intestinal stasis resulting from the indigestible substances eaten in the crises of ravenous hunger—which is more deadly to the very young than to adults, although debilitating to all. However, after taking the liquid paraffin for a sufficient time to expel the morbid deposits, digestion at once supervenes.

For these anemic patients, I have adopted a diet of raw eggs well beaten and mixed with a rice mush, morning and noon, and milk and coffee, with milk and rice mush at night. This promptly retunes the debilitated stomach. In a short time, tints of color begin to streak the pallid lips and the emaciated little folk begin to gather energy enough to make a struggle, with faith, to come out of the valley of the shadow of death. Still, I have lost some of my most interesting ones owing to the panic and flight, and exposure and lack of care or nourishment, the cause of which I shall explain further on, and which also left me all alone, for some weeks, in the street half a mile long.

Doctor Maldonado (my respected confrère in this region) is troubled with chronic

indigestion, costiveness, and bleeding hemorrhoids. I sent him, for personal trial, a supply of the oil, and expected his report to embody in this communication. However, the same influence that left me here all alone broke every way of communication with the Doctor, who probably has fled the same terror that caused the precipitate flight of every man, woman, and child from this town. I now will explain:

#### Havoc Wrought by Marauding Peon Bands

When it seemed that war was inevitable between the United States and the *de facto* government of Mexico, designing men conceived the idea of conquering all this southern country behind the army of Carranza, so as to hasten the latter's speedy downfall; and the intrigue was so adroitly handled that the peon element rose up against Carranza almost to a man. As there were no regular troops here, these rebels marched from plantation to plantation, staying one day, killing cattle and forcing the people to prepare meals for them, forcibly taking what rum and money they found, even the clothing from persons, and all the serviceable horses, mules, and saddles, sometimes not leaving even the beds.

But when the slowly creeping news finally filtered through that the United States government and Carranza were about to arrive at some pacific arrangement and that there would be a surplus of released troops to send down here, the aspect changed to a sombre pall of gloom. A Genghis Khan warfare was inaugurated against the owners of plantations, who were massacred and the properties destroyed and concomitant outrages were perpetrated—an unsparing wave of fire and blood advancing as fast as the work of destruction and rapine could be completed. Pichucalco was besieged by hardly more than a corporal's guard of rebel troops; but the people resolved to defend their town. They at once went on faminations, working day and night in fortifying the place so strongly that no attempt was made to take the town by assault.

I live miles from Pichucalco, but the terror of the people was such that they fled, with but scant clothing and bedding, leaving medicines and food in their houses, even the stores being abandoned. I have seen panics and dismayed people, but never **anything** to approach the fear displayed here, even while there yet was ample time to have moved away leisurely.

Although far away, Carranza troops arrived at Pichucalco more expeditiously than

the most sanguine had anticipated, and they soon relieved that town.

For more than three months this was rebel-territory, but, fortunately, the dominant band here of some 200 motley peon membership, in their march to aid in the reduction of Pichucalco, stopped, in the afternoon, five leagues from here at a big wealthy Spanish plantation, to prepare a grand feast in advance of the expectation of sharing in the plunder of unguarded Pichucalco, when suddenly 200 federals opened fire on them at short range. Thereupon these marauders fled, without even firing, most of them leaving their arms, the federals destroying their camp and capturing all horses and cattle. The captured culprits were hanged, while an equal penalty awaited anyone who might cut one of them down. More than half the survivors of the band have since surrendered under promise of amnesty.

Thus, in a similar manner, other marauding bands are being exterminated, not one having appeared here since the fiasco at the Spanish plantation spoken of. Immediately after that happened, the band besieging Pichucalco also fled, leaving behind them nothing but ruined homes for the rightful owners, although most of the fair and fruitful belt of this region has escaped utter annihilation, no more than one place having been destroyed within five leagues from here.

Four families here remained with me, and nothing happened to us, while the houses of those who fled were robbed. The residents are at this writing [letter dated October 31, 1916.—ED.] beginning to return, but still with fear and trembling, their anemics being dead or beyond the province of remedy.

Thus it is easy to understand why my communication with Doctor Maldonado, whose office is in Pichucalco, was broken, and I know not what happened to him or where he is at present. I presume that I am the only man in Mexico who has suffered no ill treatment at the hands of any party, and had not the slightest personal fear in the recent crisis.

#### Calcium Sulphide the Very Best Febrifuge

In this distressing scarcity of medicine in my out-of-the-way abode, when one must be resourceful and make the best of a bad situation, I have found calcium sulphide the very best febrifuge known to the profession, and that in any and every kind of fever, when thus far I had supposed that it was efficient in smallpox only, applicable when there was an excessively high fever—



temperature, but not possessed of depressant properties. But now I have used it as a general febrifuge more than one hundred times inside a few days, without a failure, nor guarding against a recurrence with quinine. One grain of a guaranteed standard preparation given every hour repeated ten times is the general adult dose, and less in proportion to the age for younger persons. Many infants have thus been treated by me.

A brisk purge is given at night, after the sulphide medication during the day. Then the sulphide dosage is continued for four or five days, in order to insure a perfect cure.

That experience was three months ago, and since then the same substance has been employed by me for febrile conditions every day, right along, all the time, the sick people coming to me from the ranches, far and near, while the inhabitants of my hamlet were away, as told. This certainly is to me a gratifying substitute while quinine is scarce and costly.

All Hail! Hale Old Man!

The months of smallpox followed by the scourge of newly hatched revolutions have dragged along slowly into seeming ages, till another year has been garnered into the store-

house of eternity of my weird pilgrimage of lingering life. And now it seems, more probably than it seemed when I was addressing you all a year ago, that I might pass the year finished tonight, that yet another year is allotted to me, for, I seem to have more vital reserve now than I had then.

The activity and endurance of a *young* man at *eighty-seven* years is so far out of the common as to be marvelous, especially after the ordeal of a laborious life of fifty-two years in this tropical environment, a life that has vouchsafed no rest nor recreation—surely trying and exhausting to any average human being. And any of you, my good readers, would regard my present daily food as a siege-ration, being practically meatless and lacking flour and sugar. Worse, yet, my garden has recently been cleaned up by grasshoppers and looks like a nicely groomed city street, save for the sweet-potato vines left untouched. The only thing you might envy me is my American grapefruit and Washington navel oranges that would shame California or Florida. Besides, I have my glorious flowers, some of which may well have come down from those which Eve lamented when driven by the angel from her Paradise.

## Medical Counsel in Charities

By T. D. CROTHERS, M. D., Hartford, Connecticut

NO ONE has written of the influence of medical men in the financial world and in the world of charities, and, yet, there is unmistakable evidence that physicians are the most influential determinant in many of the great schemes and plans in those two fields of human endeavor.

Of the over one hundred million of dollars given to charities last year, more than half bears the unmistakable marks of having been suggested by physicians. But, these gifts not always are confined to the endowment of hospitals, chairs in medical schools, equipment for medical missionaries in foreign fields, or clinics for the poor of large cities, but find application in many other ways. A certain missionary society was given a large sum of money, and they wanted to spend it on a palatial hospital in Africa. A physician being consulted, he urged that proper equipment and endowment to ensure a good doctor a sufficient salary was more essential than the building. And this idea then was

carried out. In another instance, a large sum of money was given to be used for an altar in a church. A physician who was on the board of advisers opposed this idea and insisted that the money be used to erect another building in a different part of the country where it was needed.

The time is coming when charities will be directed by physicians, who, of all persons, are most competent to judge of their need and relative importance. Whenever the judgment of physicians has been accepted regarding the disposition of property, the most practical results have followed. Illustrations of this are very numerous. Vast sums of money were expended, to relieve the yellow-fever victims, but, when the subject was taken up medically and a few physicians acted under control of the government and with an inspiration for scientific truth that was real and veritable, the germ and the mode of transmission were found; and their removal completely stamped out the disease.

If the Yellow-Fever Commission had used the money, that was given them, for real scientific work, there would have been some returns for it.

Today, there are similar commissions and charities, each trying to do something for the world, following theories and opinions, when with medical advice and counsel they could have something practical. Millions of dollars actually are wasted in stupid efforts to relieve misery and pain. In many instances, the very difficulty they try to alleviate is increased. There are charities intended to relieve pauperism, but which actually develop paupers; there are dispensaries that do harm to the community. And so on through a list of benefactions, so-called.

Now, if medical men were made prominent and consulted, there would be more real progress and benefit than at present. Physicians seldom realize their actual influence in the community, as the following incident will show.

#### A Career Redeemed

A medical student was graduated at the head of his class, filled with high aspirations and the ambition to become a leader of his chosen profession. After a series of disappointments, he settled in a North Carolina hill-town, temporarily, as he thought. Years went by, but he was unable to leave the place. Finally old age came on and with it the reflection of failure. He was a hard-working, conscientious man, who through circumstances was forced to remain where he was. At last a very wealthy man came under his care and became intimate with him. As a result, this wealthy man founded an industrial college and placed the doctor at its head. As the years went by, this man realized that at last his ambition had been accomplished. He was able to found an institution that would go down through the generations to come, blessing innumerable persons and making the world better. His life, after all, had been a grand success, although a long period of waiting and hard work in a mountain village preceded the final triumph.

A contrast with what this man had wanted to do and what he did do was startling. He had wanted to become a prominent teacher and leader and be respected in the community and among his associates, with local and national fame. What in the end he did do was, to found a great industrial school and direct the capital, so that it would go on, through long years to come. His experience

in that mountain country gave him capacity to direct and shape the destinies of a work of that kind. The donor recognized in him that superior power and efficiency to put to service the capital he himself had accumulated and to make it a great power for the future. All unconsciously through the years, the doctor was preparing for this career. His long lonely rides and contact with the poor people had been educational. It was a post-graduate school of the highest grade, and, yet, the fact was unknown to him. No forecast of human judgment could have outlined this result, but it came and he was prepared for it.

#### The Doctor's Social Obligation

How often it happens that physicians are trained in the daily school of experience for most unexpected work at some future time. A practical conclusion of this is, that physicians, as scientific men, should be alert to discover new facts and new applications of old theories and to influence capital and philanthropists to help on in the great work of developing and widening human activities. To try to accumulate large properties and thus imitate the merchant and others who are selfishly grasping to pile up resources that they can never use, is a low ideal.

The physician's true aim is, to relieve suffering and sorrow and to point out methods of better living. Higher up, his influence must be, to help others to do the same thing. If some patron of his has accumulated a surplus, he should be a warm adviser as to how it should be used in the future. This he can do, by making himself strong, wise, and generous in his instincts. While giving drugs and administering consolation, he can suggest new and higher methods of utilizing property than to leave it to families to dissipate. Thus a physician can rise above all other professions as a judge, counselor, and director, but he must be himself and not an imitator of others nor a follower of political or personal interests.

The real physician has come. In all parts of the country, he can be seen imbued with an instinct for the best of life and how to work it out. The armies of "pathies"—and of dissenters—only serve to develop and make the real man more and more prominent. The thinking public are learning to discriminate and respect the real man whose counsel and judgment appeal to them. The field of science is widening and new discoveries in every direction are being made, and the trained physician who can utilize these new

facts and intimations of the laws and forces is called for in every community. Surgery and its possibilities, drugs and their applications to disease, new ranges of causes and new methods of prevention and cure are constantly becoming more and more intense and real. There is revolution here, far more startling, in one sense, than that now going on in Europe.

#### More Good Work

The physician's power is not confined to the hospital or the bedside, but it goes higher. It turns toward giving direction and force to the bewildering activities that come up in every direction. When a quiet obscure physician was consulted by an old man as to what to do, the result which followed was a great hospital and medical school. No one realized that it was the advice of this obscure physician that was the foundation of this work. A great maternity-hospital grew up from a similar obscure source. A quiet physician, unknown outside of a small circle, suggested the needs of such a hospital, and his judgment was accepted and materialized into a great charity. A wealthy man realized that his days were numbered and consulted many persons about his will. One day, a physician who was called to a member of his family spoke of the great want of knowledge concerning germs that shortened human life, and he probably also spoke of the advantages of having some place where trained men could give all their time to the study of these subjects. The result was, that a new will was made and a great research-foundation was established which already has done grand work for the world. A great hospital for epileptics was founded upon the advice of a physician who realized the helplessness of this class. The first institution for deaf and dumb in this country grew out of a physician's suggestion that such victims could be greatly benefited if they were studied scientifically.

Every year, money given to charity seems to be more direct and have for its purpose decided benefits. Palatial buildings must necessarily grow less as their uselessness becomes more apparent. Massive structures are not always charities—although the purpose and object may be good, the money spent in this way is largely lost.

A great many successful men and women would like to do something to help those who have failed in life, and their efforts often are dissipated by giving the various charities founded on theories and managed by impractical persons. If such persons would combine to study the subject scientifically,

to determine the real causes of pauperism, then, apply their efforts to remove these, most prominent results would follow. It is the misapplied charities of the present that are so pitiful and distressing.

#### How Not to Do It

Often when a large sum of money is left for some specific purpose there is tremendous waste in the salaries of officers to manage it and in elaborate methods for distribution. An immense sum of money was left to the wife of the donor, to be used in charity work. In despair of her ability to do this, she put it in the hands of trustees, who promptly invested it, voting themselves large salaries and giving only the income from the interest, and doing even that in a most grudging way.

Evidently one of the great evils of the present time is, the alcoholic problem. The urgency for practical measures for relief have started a prohibition wave that positively will sweep over the whole country in the near future. This will bring into more or less prominence an immense army of men and women who had been using spirits and drugs for their narcotic effects, and new problems will follow from this.

At present, with all the literature and studies, no one has answered scientifically the question of why men turn to alcohol and drugs for relief or why men drink. Laboratories have determined the effects of alcohol upon the organism, and this has revolutionized theories and opinions of the past; but, what causes behind all these are responsible for the drink craze still remains unanswered. How they can be relieved until these causes are known is the great question.

If one in every five families suffers from the drink-evil, what is to become of this large army when spirits are altogether banished? How are they to be helped? There is only one way: to determine these facts scientifically, above theory and prejudice; then the means and measures will appear. A research-work has been started in Hartford, Connecticut, to do this very work, to explore this unknown field and discover the laws of growth and development which disables so many thousands of men and women in this country.

This is the new work called for beyond all theories and opinions and is along the lines of the highest scientific efforts. It appeals to philanthropists for endowments to become permanent and is full of possibilities of the most stirring discoveries of new means and measures, of prevention, unknown at present.

# What Others are Doing

## TARTAR EMETIC INTRAVENOUSLY AS A CURE FOR MALARIA

Quinine has so long been looked upon as the specific, and the only specific, for malaria, that it is interesting to learn that such an eminent practitioner as Sir Leonard Rogers, of Calcutta, has demonstrated the value of intravenous injections of tartar emetic as a curative agent in severe forms of malaria.

In an article appearing in *The British Medical Journal* for January 6 (page 6), Rogers describes five different cases in which this remedy was used. Most of these cases were of the malignant tertian variety, but two were of the benign tertian. The results obtained in all of them convinced Rogers that antimony and potassium tartrate will be found of value, not only in tertian, but also in the quartan forms, the latter, however, being rare in Calcutta. He was unable to report a case of this variety in which the remedy was tried.

The majority of the patients treated had received a number of courses of quinine, but in spite of this the disease persisted. In every instance reported, numerous crescents were found in the blood. After the tartar emetic had been injected, the number of these protozoic forms became less and finally disappeared altogether.

The first patient was a Russian sailor, aged 20, admitted for general debility, without fever. Malignant tertian crescents were found in the blood. On the fourth day, he was given 4 cgms. of tartar emetic intravenously, on the 5th, 8 cgms., and on the 8th, 8 cgms. After these three injections, the crescents entirely disappeared. The final dose of tartar emetic (12 cgms.) was administered on the 11th day.

The next patient was a European, a man 45 years of age, who had been suffering from fever for ten days. Quinine was given, but this produced no results. Thereupon quinine was omitted from the therapy and tartar emetic substituted, in 8-cgm. doses. On the second day, one such dose was given intravenously, and on the 9th day another dose of the same kind. After the 13th day, none

of the parasites could be found in the blood. An interesting feature of this case was the relative rise of temperature to 104.8 °F. on the evening after the second injection. This was ascribed to the liberation of toxins in the blood following the parasitocidal action of the tartar emetic.

The tartar emetic is usually given in a 2-percent solution, the dose varying from 4 to 12 cgms., the average dose, however, apparently being 8 cgms. Rogers does not say whether any special reaction followed the administration of this dosage, aside from the rise of temperature already mentioned.

While he admits that evidence is still lacking to demonstrate conclusively the antiperiodic value of the drug, he is now of the opinion, from the evidence at hand, that, while quinine should be given early in cases of this kind, to check the malarial paroxysms, it is desirable to try tartar emetic intravenously subsequently, in order to destroy the parasites during the extracorporeal stage and thereby prevent relapses. By so doing, it may be possible to lessen the infectiveness of the patient to malaria-bearing mosquitoes and in this way diminish the spread of the disease.

This observation should prove of extreme interest to the readers of *CLINICAL MEDICINE* in our southern states. If, as seems to be the case, tartar emetic is an effective as well as a harmless remedy when given by the intravenous route, it is deserving of much more general and careful investigation. Who will try it and report results?

## CAUSE AND CURE OF NEPHRITIC ACIDOSIS

It is a well-known fact that during the course of nephritis, particularly in its terminal stages, there is a tendency toward what we know as acidosis or acidemia. The exact cause of this condition has never been very clearly explained. A new theory, and one which offers a valuable therapeutic suggestion, is presented by Marriott and Howland, of Johns Hopkins University, in the November 15, 1916, number of *The Archives of Internal*

**Medicine.** These investigators have conducted a series of tests of patients suffering from nephritis, both with and without acidosis. In the former, they were able to demonstrate retention of acid phosphates in the blood. It is this phosphate retention which the authors believe to be the cause of the acid state in persons suffering from Bright's disease; the fundamental cause being found in the interference with the specific functioning of the kidneys.

While the acidosis may be overcome by means of alkalis, the authors declare that it is a matter of experience that little more than this is accomplished, since the disease usually progresses to a fatal termination. Moreover, the administration of sodium bicarbonate generally fails to bring about a marked reduction of accumulated phosphates.

The best remedy seems to be calcium, a significant fact being that in most of the cases cited a marked reduction of this element in the serum was observed. As to this, the authors say: "What influence this low calcium content may have on the production of such symptoms as convulsions and hemorrhages can only be suggested. The low calcium content is to be referred to the excess of phosphates in the plasma. It has repeatedly been shown that phosphates administered in any form cause an increased elimination of calcium, chiefly by way of the intestines. The converse is also true. The administration of calcium leads to an increased elimination of phosphate, also by the bowel. This fact offers a suggestion for a rational therapeutic procedure."

In other words, in the treatment of nephritic patients presenting symptoms of acidemia, calcium in some form is worthy of careful trial, inasmuch as the calcium phosphates formed during such a course are eliminated through the intestine rather than through the kidneys; whereby, also, work is spared these important organs. We hope that some of our readers will try calcalith in cases of this kind, for, on theoretic grounds, it seems to be directly indicated. We shall welcome reports.

#### WHAT IS MUSCULAR RHEUMATISM?

That there subsists some relationship between muscular rheumatism and neuralgias—often clinically not to be differentiated—is the contention of Adolf Schmidt (*Med. Klin.*, 1916, No. 19). Thus, he points out: Frequently lumbago and sciatica pass one into the other; many times the latter condition

accompanies lumbago or evolves out of it. So in brachialgia one often finds it difficult to determine whether it is the nerve or the muscle that is affected. Hence, according to the author, it is more than probable that what is termed muscular rheumatism really represents a neuralgia of the sensory nerves of the muscle affected—thus explaining, also, the close association of these two forms of painful affections.

#### APPLICATION FOR ERYSIPELAS

The following combination of iodine with guaiacol was recommended a few years ago in the *Muenchener Medizinische Wochenschrift*:

Guaiacol.....	part 1
Tincture of iodine.....	part 1
Glycerin.....	parts 8

Painting the lesion with this mixture three times a day is asserted to arrest erysipelas in its initial stage and to effect a rapid cure.

#### PERCENTAGE OF ACTIVE PRINCIPLES IN DIGITALIS

For the purpose of obtaining a physiologic basis of comparison of the values of the leaves and seed of digitalis (purpurea), Walter Straub (*Arch. f. Exp. Path.*, 1916, p. 52) fixed the absolute minimal lethal dose for a frog (*rana temporaria*). Completely exhausting the crude drug by means of the calcium-hydrate process, Straub found, by the biologic test as given, that digitalis-seed contains 1.3 percent of active glucosides, consisting of digitalinum verum and digitalein; and that the dry leaves contain 1 percent of active glucosides, 2-3 of which—gitalin and digitalin—are water-soluble, and the other third, which is digitoxin, is insoluble. Cold water extracts from the leaves all the gitalin and digitalin and a trace of digitoxin.

The presence of alcohol or the application of heat considerably reduces activity of the extraction; hence, the hot infusion of digitalis-leaves contains less of the active glycosides and a trifle more of digitoxin—which latter the author apprises as of little importance therapeutically.

#### ALCOHOL FOR STERILIZING THE SKIN

Investigations lead J. Strauss to assert (*Beitr. z. Klin. Chir.*, 1916, p. 383) that plain alcohol suffices for sterilizing the skin of the field of a surgical operation. However, the



alcohol must be of high percentage, anywhere between 90 and 99 degrees; in which case he finds it fully equal to alcoholic solutions of iodine and of thymol. On the other hand, when the alcohol ranges from 60 down to 40 degrees, the effect is, only to release and bring to the surface the imbedded germs. This latter point seems well worth bearing in mind.

#### NICOTINE DETERMINES "STRENGTH" OF CIGARS

When a cigar-smoker speaks of "strong" and of "mild" cigars, he refers to a certain sensation experienced in the smoking. That this relative "strength" is a function of the nicotine contained in the tobacco leaf, has been definitely demonstrated by a German investigator, who has reported his findings in the *Zeitschrift fuer Angewandte Chemie* (1916). The average results found were as follows, expressed in percentage of nicotine content: weak, 0.6 to 0.8; very mild, 0.8 to 1.1; mild, 1.1 to 1.3; medium strong, 1.3 to 1.8; strong, 1.8 to 2.5; very strong, 2.5 to 3.5.

This is for cigars; however, the figures do not apply to cigarettes and pipe-tobacco, for, here other factors enter, inasmuch as the method of combustion gives rise to modifying products that determine what the smoker calls "strength."

#### TETANUS RELAPSE AFTER A TRIVIAL OPERATION

An instructive case-history, as published in *The British Medical Journal*, showing the risks which in certain circumstances may attend even trivial operations, has recently been reported to the War Office Committee on Tetanus by Dr. Stanley Barnes, of Birmingham.

A man wounded in both arms and both legs by shell fragments early last summer developed generalized tetanus. He was energetically treated with serum, and, after a very severe illness, recovered. When he was first able to get out of bed, during October, he was greatly emaciated and weighed only 4 1-2 stone. He was sent to a hospital in the suburbs, to recuperate and for treatment of some of the wounds. The latter healed, but toward the end of February one of the many subcutaneous fragments of shell in the right thigh was giving pain, and the medical officer under whose care he then was froze the skin, made an incision, and removed a bit of metal three-eighths of an inch long. Within twenty-

four hours, the patient was in the throes of a severe attack of local tetanus, which for a week kept the whole of the right lower extremity in tonic spasm.

Relapse of this kind, particularly when the wounds have all been completely healed for four months, must be unusual, but the case provides a warning against doing even trivial operations, that apparently are aseptically, without giving a preliminary dose of antitetanus serum.

#### THE GASTRIC ONSET OF PULMONARY TUBERCULOSIS

In the early diagnosis of pulmonary tuberculosis, it often happens that the constitutional signs are the only indication of ill health; or, to put it more clearly, there are certain more or less indefinite signs of organic disturbances which may not necessarily point to or suggest pulmonary disease, the latter being recognized only in the further course of events.

In a brief but important communication to *The New York Medical Journal* for March 10, Doctor Bassler relates that he and his associates have been interested for some months in cases that came under observation for digestive disturbance and in which eventually symptoms of pulmonary tuberculosis were manifested. At first, he was inclined to treat these patients along the lines of gastric or intestinal disorders, upon a diagnosis of conditions made at the time, in the expectation that they would respond to treatment. It was not until two or three of them showed pulmonary symptoms that his attention was directed to the fact that perhaps those gastric disturbances of which the patients complained really were initial symptoms of pulmonary tuberculosis.

The author's observations in this respect are of great clinical importance, demonstrating, as they do, the fact that symptoms of digestive disturbances are to be observed in incipient tuberculous disease in a fairly large percentage of cases and this probably would be even greater if all cases could be observed and followed closely.

These gastric disturbances may consist in anorexia, possibly associated with indefinite distress after meals. Usually investigation does not show anything organically wrong with the stomach. Doctor Bassler's attention had been called to the possible relation of these symptoms to tuberculosis, by fluoroscopic examinations of patients resulting in the diagnosis of pulmonary disease being

made, and, in consequence, he points out that in cases of gastric disturbances the possibility of pulmonary tuberculosis should be kept in mind and that in taking the history of young patients attention should be paid to any slight symptoms referable to the respiratory tract and a fluoroscopic examination of the chest should be made.

Tuberculosis-physicians have become quite accustomed to suspect a possible tuberculosis whenever indefinite gastric symptoms are complained of. With the general practitioner, this possible and even probable diagnosis does not suggest itself so frequently, especially if there are no symptoms or signs associating the lungs with the deranged condition; and, after all, the diagnosis depends in great part upon those affections that enter the physician's mind as possible or probable.

Consequently, it is well to keep in mind that the earliest symptoms of pulmonary disease may be without any direct reference to the lungs. They may consist particularly in digestive disturbances, although very often fatigue upon slight exertion, loss of weight, and want of nervous balance are in evidence. It is in these cases that the diagnosis of some pathologic lung process would be of particular value, because the tuberculous process as yet is very likely to be truly *incipient*, and, therefore, susceptible of arrestment in a far greater degree than it will be after the tuberculous focus has advanced to tissue destruction, after tubercle bacilli have appeared in the expectoration and associated infections have occurred, with their deleterious consequences.

#### SOME EXCELLENT RECIPES FOR THE SICK

Although the gelatins possess comparatively little value as nutrients, inasmuch as they cannot replace proteins in the diet, being incapable of taking part in tissue reproduction, they are of considerable practical importance. Their role in the body economy being restricted to a slight liberation of energy during their metabolism as food, they act as protein spacers. Likewise, they are easily digested without residue, cool and grateful to the palate, quickly melt in the mouth, and are ingested with a minimum effort of mastication and deglutition.

Writing in *The Prescriber* for April, Dr. John Campbell suggests that, when jellies form part of the diet in disease and convalescence, they should be made vehicles

at the same time for the introduction of protein and carbohydrate material. This is easily accomplished, by adding suitable food-principles. We believe his recipes to be of sufficient practical value to be reproduced.

**Milk Jelly:** Skimmed milk should be used in lieu of water for the preparation of the jelly. The jelly turns out opaque, but then contains about 4 percent of protein and 4 percent of milk-sugar.

**Protein Jelly:**

The white of 2 eggs  
One square of jelly (pint-size)  
Water, 1 pint.

Separate the whites from the yolks and add 4 ounces of water. Well beat and strain through fine muslin. Melt the jelly square in 16 ounces of water at a temperature not exceeding 145° F. When melted, add the 4 ounces of strained egg-white. This jelly should set clear.

**Protein and Carbohydrate Jelly:** Protein jelly may be made a source of carbohydrate material by dissolving 2 ounces of milk-sugar in the 16 ounces of water before using to melt the jelly square.

**Peptone Jelly (Stimulating):** For this purpose, it is convenient to use a prepared peptone product. The following is a typical formula:

Carnrick's "liquid peptonoids" (beef, wheat, and milk, in pre- digested form).....	2 ounces
Isinglass (about 1 tablespoonful, flat).....	40 grains
Water.....	3 ounces

Melt the isinglass (gelatin) in the water at a low temperature, strain, and add the "liquid peptonoids." This jelly sets cloudy. It contains peptone, albumose, maltose, and a small percentage of sherry.

**Peptone Jelly (Nonstimulating):** Formerly the German-produced somatose was largely used for this purpose, but Carnrick's "dry peptonoids" (beef, wheat, and milk, predigested) are much more efficient, being 99 percent soluble.

The following formulas are typical:

1. One pint bottle of calves' foot jelly, 2 tablespoonfuls of "dry peptonoids." Melt the jelly and stir in the powder until dissolved. This jelly sets slightly cloudy.

2. One square of jelly (pint size), 2 tablespoonfuls of "dry peptonoids." Dissolve the powder in a little less than one pint of hot water. Add the jelly square in shreds. When dissolved, allow to set. Strained meat-juice may also be added to

the jelly, but the melting-temperature should not exceed 145° F.

Patients may take jelly practically all day long, at short intervals, without harm. When the patient has an elevated temperature and the throat and mouth are dry and parched, as in tonsillitis, quinsy, fever, and so on, a jelly flavored with fruit-juice or citric acid is preferable. In gastric ulcer, carcinoma of the stomach, gastric catarrh, and after operation, where acids and fruit flavors may be contraindicated, a plain unflavored jelly is best.

#### HOW LONG WILL DIPHTHERIA-ANTITOXIN KEEP?

In view of the too prevalent opinion that diphtheria-antitoxin is an extremely sensitive remedy, spoils easily, and should not be employed after it has been kept on hand for some length of time, it is interesting to learn of the growing volume of evidence tending to show that this antitoxin is not such an unstable and sensitive substance as most of us have been led to believe.

Dr. A. T. MacConkey, bacteriologist in charge of the serum-laboratories of the Lister Institute of Preventive Medicine in London, presents some interesting evidence on this point in *The British Medical Journal*, January 6 (page 10). At first, he gives a résumé of the work of others, quoting Anderson, who, in 1910, declared that the average annual loss in unitage is about 20 percent when the serum is kept at room temperature, about 10 percent per annum, at 15° C., and about 6 percent per annum, at 5° C. Anderson also showed that "old serums are just as good as fresh serums, when the relative unitage is taken into account".

MacConkey, in 1913, carried out a series of experiments, which confirmed the results of Anderson. At that time, he found that the loss during one year amounted to 7 percent when the serum was kept in an ice-chest, 14 percent at store temperature, and 51 percent at 36° C. (97° F.). The tests made by a number of other experimenters are also reported. Lastly, the author offered a table giving the results from an examination of a number of samples of serum which had been in commerce and which were all returned at the same time. The average period during which these serums were on the market was about two and one-half years, and the average loss in unitage during that period was about 23 percent; in other words, about 10 percent per annum.

In view of the fact that a good many of these samples (belonging in all to 31 batches) had, evidently, been exposed to a high temperature, as shown by the large loss in unitage (amounting in one instance to 45 percent), it was quite plain that diphtheria-antitoxin, when kept under proper conditions as regards heat and light, is a remarkably stable substance. It is safe to say that, when this product is treated with ordinary intelligence, the loss per annum will not exceed 5 or 6 percent, as already shown in Anderson's earlier investigations.

The simple truth is that diphtheria-antitoxin, and probably most other antitoxins and serums, are pretty nearly equal, in keeping-qualities, to a large number of the tinctures and other fluid preparations of the galenic drugs offered for prescription purposes on the druggists' shelves; but—the physician should make it his business to see that the diphtheria-antitoxin he prescribes and uses is dispensed by a pharmacist who understands the importance of caring for such preparations properly.

#### TINCTURE OF IODINE BY THE MOUTH

It has always been a cause of regret that it was so difficult to find an acceptable mode of administering free iodine internally, and numerous are the preparations that have been proposed for the purpose, some of which act excellently, while others are open to all the objections that are raised against the internal administration of the tincture of iodine. In view of the fact that the physician may be in a position to have no acceptable preparation of iodine available for internal administration, while tincture of iodine always is on hand, a note by H. Ewan Waller to *The Prescriber* for April, is of interest, who is enthusiastically in favor of the internal use of *tinctura iodi mitis* of the British Pharmacopeia, given, in doses of 2 minims three times daily, in peppermint-water.

This preparation, which has the merit of cheapness and is very easy to dispense, is claimed by Waller to be a wonderful tonic for children, especially those of tuberculous tendency, and seems to impart life and vigor and to improve appetite. It is equally effective for adults, the gain of weight in many weakly and debilitated patients being remarkable. Others do not gain weight, still, a sense of wellbeing is developed.

While the objection has been raised that there is danger of producing hyperthyroidism or actual Graves's disease by the use of the

tincture of iodine, Waller has witnessed no such result, although using the remedy in hundreds of cases; indeed, he has found it to be a most valuable agent in the treatment of Graves's disease.

While we believe that the splendid clinical results which are described in this article can be secured with other iodine preparations with less danger of digestive disturbances, yet, we cannot deny that the suggestion is of value under certain circumstances and that it is particularly worthy of a clinical test when for some reason or other the tincture of iodine is the only form in which this drug is available.

It is to be kept in mind, however, that the mild tincture of iodine of the British Pharmacopeia contains less of the iodine than does the tincture of iodine, U. S. P., the respective formulas being as follows:

Tinctura Iodi Mitis. (British Pharmacopeia.)	
Iodine.....	25 Grams
Potassium iodide.....	25 Grams
Distilled water.....	25 milliliters
Alcohol (90-percent), sufficient to produce.....	1000 milliliters
Tinctura Iodi. (United States Pharmacopeia.)	
Iodine.....	70 Grams
Potassium iodide.....	50 Grams
Distilled water.....	50 milliliters
Alcohol, a sufficient quantity to make.....	1000 milliliters

#### CALCIUM CHLORIDE IN ASTHMA

Out of 25 cases of bronchial asthma treated by C. Kayser, of Berlin, with calcium chloride (*Zeitschr. f. Exp. Path.*), all but 3 yielded satisfactory results. Within three or four days, the number as well as the intensity of the attacks grew less and disappeared altogether after a course of two weeks, and in the greater proportion did not return inside of six months or even longer. Aside from the typical cases of asthma, also asthmatic conditions associated with chronic bronchitis or emphysema were favorably influenced. A few cases proved refractory, among them, 2 with reflex asthma.

The 5-percent aqueous solution of the calcium chloride, that had been prescribed, having such a disagreeable taste, Kayser devised the following mixture:

Calcium chloride, dry, c. p.....	Gm. 20
Dilute hydrochloric acid.....	Gm. 4
Syrup.....	Gm. 200
Water, enough to make.....	Gm. 400

Of this, a tablespoonful is to be taken, in half a glass of water, every two hours.

This therapy is based upon the idea that calcium antagonizes the bronchospasms resulting from an irritation of the vagus-nerve.

This theory Kayser was able to support experimentally; namely: he produced asthma in rabbits by overdosing with pituitary extract, and then suppressed the condition by means of calcium chloride.

#### ENLARGEMENT OF HEAD, POSSIBLY OWING TO FACIAL ERYSIPELAS

An instance of progressive elephantiasis of the head, involving both the bony and the fleshy structure, is recorded by E. Marcovici (*Militaerarzt*, 1916, No. 40), which is of interest casuistically; although, coming under observation in the field-lazareth, an exhaustive examination, especially radiographic, was precluded.

While both parents died (at advanced age) of tuberculosis, the subject, a man of 41 years and of well-developed skeleton and musculature, is the father of seven healthy children and none of his own vital organs (heart, lungs, kidneys, and blood) show any pathologic deviation. Healthy up to his eleventh year, a discharge of pus from the nose then made its appearance, and this became a chronic condition, with a periodical swelling of the nose and the entire facial integument. During the last thirty years, this condition was treated as chronic erysipelas. From time to time (about every two months), he is seized with headache, dizzy attacks, a sense of tension all over the face, and feverishness; this lasting five or six days. Sometimes the eyes swelled shut and burned. These accesses were more frequent in the winter months. Some years ago, the head began to enlarge, the head-pains grew more severe and more constant, while seeming more localized in the bone.

Present condition: The entire head is abnormally enlarged, soft as well as bony parts; the skin of the face is thickened; nose, lips, ears are considerably enlarged; the bones are abnormally developed, especially so the nasal bridge and lower jaw, and very sensitive to pressure.

The Roentgen-picture indicated thickening of the important bones, changes in the region of the sella turcica, and considerable divergence between the anterior and posterior clinoid processes. No abnormality in the eyes was discovered. However, in the left nostril, a polyp was found, while pus was present in the middle right-side nasal passage.

Doctor Marcovici assumes, provisionally, the chronic inflammatory condition in the region of the face (presumably erysipelas) as the cause of the elephantiasis localized in



the head. It may be remarked that he makes no reference, in this connection, to the probably diseased state of the pituitary gland as the possible immediate reason for the undue osseous development.

#### EURESOL FOR FALLING OF THE HAIR

For treatment of seborrhea of the scalp and the accompanying falling of the hair, Dr. Paul Jacob, of Charlottenburg (*Dermatol. Wochenschr.*), has been using, with satisfactory results, the following formula:

Euresol.....	10.0
Alcoholis.....	125.0
Aquæ destillatæ, q. s. ad.....	250.0

According to individual indications, bichloride of mercury, tannin, quinine, salicylic acid, and the like, may be added to the foregoing. If the scalp is very dry, it is advisable to embody 5 Grams of liquid paraffin in the formula or to prescribe euresol as a pomade. For instance:

Euresol.....	5.0
Unguenti pomadini albi, q. s. ad.....	50.0

Or—

Euresol.....	drs. 1 1-2
Lanolini.....	oz. 1
Vasellini albi.....	oz. 1

After euresol has been used a short time, the hair stops falling out, the dandruff disappears, and the itching ceases—facts which serve to encourage the patients and insure a continuance of the treatment. The applications must be carried out regularly for several months.

In the beginning, the remedy is applied to the scalp every other night with the tips of the fingers. The lotion containing alcohol dries rapidly. When the pomade is used before retiring, the head should be covered with a cloth, in order to prevent soiling of the bed-linen. After four weeks, it is not necessary, as a rule, to use the preparation oftener than twice a week. It is of advantage to wash the scalp, from time to time, with sulphur-soap, although a too frequent use of soap and water is not to be recommended.

A proper mode of life and especially regulation of the digestive functions undoubtedly serve to aid the local treatment.

#### THE ANTITUBERCULOSIS MOVEMENT IN THE PHILIPPINES

The Philippine Islands Antituberculosis Society, which was founded five years ago, recently was reorganized and developed a new program for a more efficient and aggressive

sive propaganda of its campaign. The first numbers of *The Anti-Tuberculosis Bulletin*, in its new form, are before us and tell of a great and difficult struggle being carried on bravely. The tuberculosis situation in the Philippine Islands presents unusual difficulties, because of the extreme ignorance of the lower classes, who are opposed to the teachings of the tuberculosis visiting nurses.

As is usual in endeavors of this kind, the available funds are all too small for carrying out the purposes of the society; nevertheless, it hopes to establish a preventorium for the care of predisposed (so called) persons and to extend its activities in the provinces.

This antituberculosis movement may be said to afford, in a measure, an important instrument, directly and indirectly, in the civilizing of peoples under its dominion, and we extend our sympathy and our best wishes for success to the Philippine Islands Antituberculosis Society in its brave struggle.

#### THE RELATION OF SMOKING TO CANCER OF THE MOUTH

It is commonly asserted that smoking is an important factor in the etiology of cancer of the mouth, and most authors content themselves with ascertaining the fact that a certain very high percentage of patients showing malignant lesions of tongue, lips or gums have been inveterate users of tobacco. On the other hand, Williams states, in his "Natural History of Cancer," that his evidence shows definitely the absence of any relation between cancer of the mouth and tobacco.

In a study of 638 cases of cancer of the oral cavity, Dr. Joseph Bloodgood (*The Dental Rev.*, May) investigated this etiological factor rather closely. It is easy to arrive at the conclusion that smoking stands in direct relation to cancer of the tongue, from the mere fact that of 167 cases of lesions of the tongue only 4 had been observed in women, and that 3 of these had been using snuff [by "dipping," that is, in the mouth.—Ed.]. Nevertheless, Doctor Bloodgood suggests that possibly smoking, or, better, the use of tobacco may not be responsible in itself for the malignant disease, since he has the impression that smokers, as a rule, are less cleanly in their mouths than those who do not smoke, and that, perhaps, if the smokers observed the same mouth hygiene, there would be less cancer. It is a fact that, of the 163 males with cancer of the tongue or some other lesion, by 6 of them a definite statement was made that tobacco had not been used by



them; and about the same proportions of positive and negative histories were obtained in 276 cases of cancer of the lower lip.

It is, therefore, manifestly incorrect to base a positive assertion, that the use of tobacco is an important cause of malignant disease, upon the mere fact that tobacco has been indulged in by a large proportion of the patients. Doctor Bloodgood's explanation, that of a possibly relatively careless mouth hygiene deserves consideration, and it remains to be seen whether smokers who keep their mouths scrupulously clean show a like frequency to cancer of the mouth as do smokers in general.

#### ADRENALIN IN NEPHRITIS

A communication from I. Harris in *The Liverpool Medico-Chirurgical Journal* is abstracted in *The Prescriber* for April, in which the author relates that he has been using adrenalin for a considerable time in the treatment of nephritis, both as a diuretic and for lessening albuminuria. The majority of his patients have done extremely well under this treatment, cases in which ordinary methods had produced no effect having shown marked improvement. From 5 to 10 minims of the 1 : 1000 solution was given by mouth from once to four times daily. Two cases are described, showing in tabular form the amount of urine and of albumin, also the blood pressure, from day to day. A connection between the blood pressure and the output of urine is traced.

#### ABDOMINAL KNEADING IN THE TREATMENT OF ABDOMINAL STASIS

The causes of intestinal stasis are numerous, but one of the most important is, the anatomical construction which makes it necessary that in the first section of the large intestine the food should travel against gravity and at the summit of the ascent turn the sharp corner of the hepatic flexure; and this just at the spot where in women it comes under the pressure of the corset. The difficulty of transit is increased by the fact that, whereas the contained food is in a semiliquid state in the stomach and small intestine, it has become semisolid in the colon, owing to the absorption of moisture.

In addition to this, Dr. J. S. Bolton (*Brit. Med. Jour.*, March 31) points out that the passage from a tube of small caliber, such as the small intestine, into a large elastic pouch, such as the cecum, tends to favor delay, and

that this may further be promoted by sagging of the transverse colon, by adhesions or other mechanical factors.

Doctor Bolton recommends abdominal kneading in cases of intestinal stasis—or constipation—for the purpose of supplementing the action of laxative remedies that may be employed for the emptying of the intestinal tract. The patient can, after careful instruction, carry out this treatment for herself. Lying in a warm bed, in a comfortable position on the back, so as to relax as far as possible the abdominal muscles, she must place both warm hands, with the fingers flat, upon the abdomen over the position of the cecum. Gentle but firm pressure must now be made, gradually getting deeper and deeper as the muscles relax and the contents give way. The pressure must be made backward and upward and must continue at this spot for at least two minutes. The contents cannot be easily driven back into the small intestine, and, therefore, will be impelled forward. The hands, still pressing deeply, are made to follow the contents up the line of the ascending colon.

For the purpose of assisting the passage around the hepatic flexure, the fingers of the right hand are placed at the right loin, in the cleft between the lower ribs and the hip-bone, and pressed firmly forward. The left hand is placed at the corresponding spot on the front of the body and then pressure is brought to bear so that the bowel is squeezed between the two hands and emptied of its contents. The pressure may be relaxed and repeated several times. The gall-bladder is then manipulated by forcing the tips of the fingers of both hands under the ribs at the position of this viscus and pressure being brought to bear upon the fundus. Deep kneading is now applied over the transverse colon, pressing toward the spleen. The splenic flexure is treated in the same manner as the hepatic, but it is far less important. Indeed, the only other important part to treat is the sigmoid flexure, and here the pressure must be exerted downward.

The patient should treat herself after getting to bed at night and again before rising in the morning, spending fifteen to twenty minutes in the process. Steady pressure and great patience are necessary if any success is to be obtained.

The most obvious effect of the kneading is, the passage of flatus, which usually occurs while the treatment is in progress. This frequently is followed later on by an action of the bowels.

# Miscellaneous Articles

## Concerning Amenorrhea

VERY often the doctor will hear the plea: "I have missed only one period, and there, surely, can be no danger in doing something so early." To this kind of argument the best answer is, "Madam, that is the most dangerous time of all."

Indeed, it is a fact that of all the deaths from abortion that I have seen in thirty-three years—over 90 percent have been from sepsis in cases where the pregnancy had existed less than two months. When we consider the physiology of early pregnancy, the reason for this fact is not difficult to understand. The placenta is not formed until about the end of the second month. Previous to that time, the mucosa of the uterus (decidua) is enormously thickened and if abortion occurs its detachment is difficult, and yet, it must be thrown off. As long as this decidua remains in place, the danger of decomposition and infection is very great. The larger the mass within the uterus, the more readily that organ will empty itself by contraction, on the same principle that you can grip a baseball harder in the hand than you can a marble. I am convinced that the most dangerous time for abortion to occur is at about the beginning of the second month, and that it continues to grow safer from that time on to the end of the pregnancy.

The greatest danger of severe hemorrhage is, from the end of the second month to the end of the fourth, but death from abortion seldom results from the hemorrhage. I am aware that death from hemorrhage is possible, still, it is so rare that I have never seen it to happen. I have seen a good many such women bleed very nearly to death, but it seems to me as if, when the blood pressure becomes low from exsanguination, there is a tendency toward spontaneous checking.

The foregoing remarks on the subject of abortion may seem to the reader a digression; however, the matter presents itself to the office gynecologist so constantly that I

strongly felt the advisability of its discussion in this article.

The treatment of imperforate hymen is surgical and should not be attempted in the office. The proper procedure is, to administer an anesthetic and then quite slowly draw off the fluid, especially if the accumulation be large, using a large aspirating-needle or a very small trocar and cannula. The patient should be kept in bed for several days afterward, as involution of the uterus must occur and sepsis is a possibility.

When a married woman is approaching the age at which the change of life may be expected, the suspension of menstruation may cause her to suspect the possibility of pregnancy, and doctors often are importuned for a prescription to bring on the suspended function under these circumstances. It is best to refuse to prescribe, for, if the suspension is the effect of the menopause, no medicine for it is required, while, if pregnancy exists, no interference, of course, must be ventured.

The whole subject of the menopause as well as of disturbances of health so often following its inception is an important one. The majority of women suffer at this time more or less disturbance of health. With some, it is merely a discomfort, but it may vary from this degree to serious and even fatal disease. Disordered function of the nervous system commonly is present. These nervous disturbances while not as a rule serious, nevertheless are capable of causing a great deal of suffering and of changing a sane and normal woman into an irritable, fretful, and complaining invalid, overwhelmed with melancholy, a burden to herself and a trial to her friends.

One of the commonest symptoms during the menopause is that disturbance of the vasomotor nerves which these patients call "hot flashes." Many times a day a wave of heat seems to pass over the whole body; the skin becomes deeply flushed and the patient

feels as if she must have fresh air or else suffocate.

A great variety of nervous symptoms are possible at this time, owing to the fact that the entire nervous system, or any part of it, may be affected through the sympathetic system by the changes taking place in the reproductive organs. Some of these symptoms are so bizarre that wrong diagnoses can easily be made, since there seems to be no apparent connection between them and the menopause. No matter how large a doctor's experience may have been, he is always liable to meet something new in this line.

Only a few months ago, I saw a case that simulated exophthalmic goiter so closely as to deceive several good diagnosticians in a neighboring city. When the patient came to me, after months of unsuccessful treatment, the frequency and severity of her hot flashes led me to suspect that the whole trouble might be connected with the menopause. I put her upon the treatment which is my main dependence in the various troubles of the climacteric, and which will be described further on. In two weeks, the improvement was striking. Before that, she had been unable to lie down for days at a time, owing to the violent cardiac palpitation and dyspnea. Now she slept every night lying in bed or on a couch. In three months, she was well to all intents and purposes.

My sheet-anchor in the various disturbances of the menopause is (and now let the skeptic laugh!) the formula known as Baer's sedative—valerian, sumbul, and asafetida, 1 grain of each. I have experimented with each drug separately, but did not get the same good results that I do from the combination. I have found this combination to be a great producer of new business. Patients are so pleased with the results that they bring their friends. When I used to give patients a prescription to be filled at the drugstore, I soon found that they got copies and refills for all their friends. I got the glory and the druggist got the money. Now I keep sugar-coated tablets of the remedy and get both. Besides, I am sure of the quality of the materials used.

Every form of nervous disorder brought on by the change of life is benefited by this line of treatment. Of course, where there is indication for special treatment, I add it. If there is faulty digestion or imperfect assimilation or constipation or anemia, I give the appropriate remedies. But, it is surprising to see how often even these conditions improve under the influence of Baer's

sedative alone, and that, because it relieves the nervous disturbance that provoked them. This remedy is one of the most valuable in my materia medica; it is prepared in the form of tablets containing one grain each of Extract Valerian, Extract Sumbul and Asafetida. While using it chiefly in the neuroses of the menopause, I find it to be of value also, and preferable to the bromides, in nervous and hysterical conditions at any time, in both sexes.

WILLIAM RITTENHOUSE.

Chicago, Ill.

[This article is continued from page 364 of the May issue of CLINICAL MEDICINE and closes Professor Rittenhouse's paper on amenorrhea. A further paper on nonoperative gynecology, dealing with gonorrhea in women, appears among the original articles in this issue.—Ed.]

#### A RELIABLE QUININE MIXTURE FOR MALARIA

I have a prescription for malaria that should be in the hands of every physician, for the benefit of humanity; for, it really is the surest antiperiodic I ever used. I got it, years ago, from a southern physician whose name I have forgotten. The Doctor told me that he had used it in a malarial district for twenty-eight years, without a failure, in all cases of periodic malarial conditions. After using it myself in a more limited way for fifteen years, I am ready to believe him. Here it is:

Quinina sulphatis.....	drs. 1 1-2
Spiritus ætheris nitrosi.....	drs. 5
Spiritus lavandulæ compositi.....	dr. 1
Acidi nitrici.....	dr. 1

Triturate the quinine and part of the spirit of nitrous ether in a mortar until liquefied, then add the nitric acid, little by little, under constant stirring. Then add the remainder of the nitrous ether, and lastly the lavender-spirit, and stir until all is incorporated. Let it remain in the mortar for fifteen minutes, stirring occasionally.

The dose of this is 20 drops, in a little water, every three hours.

I hope that no one will say, "Humph, quinine mixture." Its action is different from that of mere quinine, and it has a positive effect, which quinine does not always have. Doctor Abbott used to talk of the "synergistic whole", and this seems to apply to this preparation.

I could tell of scores, yes, hundreds of cases which have yielded to this mixture after the

ordinary treatment with quinine and coal-tar synthetics had failed in the hands of splendid physicians. Usually only a few days are required to break "chills and fever" that has persisted for months. I will not go into case-reports, but hope every doctor will try this prescription out for himself. He will not be disappointed.

H. S. BREVOORT.

Hutchinson, Kans.

#### ACUTE ENTERIC INTOXICATION

The summer bowel troubles of children are hard to classify either anatomically or clinically, for we have to deal with so many important abdominal organs that differ in their structure and in their functions. The alimentary tract is exposed to influences from without and within that may exert decided effects upon the physiological processes of its various parts. Lesions may occur in any part of its structure. These lesions will cause a derangement of function and often actual disease. These lesions may be single or multiple and may occur in various parts of the intestinal tract. Among these conditions, we may have gastritis, enteritis, ileitis or colitis, and proctitis; or, we may have every kind of a combination of these conditions. These conditions may be independent of pathological conditions in other parts of the alimentary canal.

It must be remembered that food-substances are perishable in character and susceptible to bacterial influence as well as chemical changes. Nature has constructed this long tube for a special purpose, namely, that of digesting and absorbing nutriment for every part of the organism. Therefore, we can understand why its anatomical and physiological construction is of such an intricate and sensitive nature and why it offers such a ready field for bacterial invasion and chemical change; and is, therefore, subjected to constant insult by toxic agents.

Acute enteric intoxication differs clinically from cholera infantum, in fact, from all other diseases of the alimentary canal, in that there is no vomiting and rarely elevation of temperature. If there is fever, it is characterized by a sharp rise that may reach 104° to 106° F. This is generally only temporary in character, lasting from twenty-four to seventy-two hours. It is only occasionally that we see a rise like this. In the majority of cases, the temperature is subnormal during the entire course of the disease. In fact, a rise of

temperature in this condition is looked upon as a favorable sign.

I have just returned from a visit to a patient suffering from this disease, and I will record the clinical picture as I saw it. The patient is a little girl 18 months old, bottle-fed, and has been constipated, the mother telling me that the baby never had a movement without being given a laxative. Its extremities were cold, the eyes sunken, the face was pale and the expression pinched; there were muscular twitchings and threatened convulsions. The mental faculties were dulled and the child lay in a semistupor. The pulse was 135 and very thready, the skin was cool, the temperature 97.5° F. She lay very still and offered little resistance when disturbed. Thirst was very great and the skin very dry. The bowels were constipated, but the abdomen was not distended, as often is the case. The tongue was slightly coated, she refused her bottle. She was given a large dose of castor-oil, which caused her to pass a quantity of foul-smelling mucus mingled with particles of undigested milk.

This case is typical of this disease. I have seen such patients die in twenty-four hours from the beginning of the attack, without a sign of diarrhea, and without there being one degree of rise in temperature. The amount of poison absorbed is so large that the nervous system is overwhelmed and the little one cannot rally. The milder cases are characterized by an elevation of temperature, while the degree of prostration varies in different cases.

Some of these patients have diarrhea, but most of them are constipated. The tendency is toward intestinal paralysis, often sufficient to resist all attempts to evacuate the bowels.

There is very little information to be gained from the pathology of these cases. The lesions found in the intestinal tract are of no consequence. There is an area of congestion here and there along the lower third of the ileum and portions of the colon. These are of varying intensity and in some cases are entirely wanting. There is also enlargement of the solitary follicles, with a shedding of epithelium.

As I have stated before, there may be constipation of a marked degree or there may be a moderate diarrhea. No matter which is present, castor-oil is the remedy of preference and should be given in not less than 2-dram doses. The milk should be withdrawn, whether the child nurses or is bottle-fed, and barley-water be substituted. In the event of diarrhea (a rare condition), the



indications are the same as those for cholera infantum.

In the treatment of this disease intestinal infection, with defective bowel action (paralysis), gives us our most difficult cases. The poison generated within the bowel contents seems to be of such a nature as to cause a partial paralysis of the small intestine. This, as said, may occur to such an extent that it becomes very difficult to secure an evacuation. So great is the constipation in some cases that one is led to believe that there exists an intussusception or acute peritonitis.

Bowel action should be maintained, if possible, to prevent the accumulation of gas from distending the bowel, thereby increasing the paralysis already present. Every year, the winter season sees one or more of these cases—high temperature, with great prostration and sluggish bowel action.

I have learned to place my dependence, in supporting the patient, upon the use of stimulants, a milk-free diet, powerful laxatives, and high rectal enemas. The stimulants can be given by the mouth, in some cases; in others, we must resort to the hypodermic syringe. If there is much twitching of muscles or irritability of the nervous system, especially if there is a tendency toward convulsions, never use strychnine.

Strophanthus is our best heart stimulant in these cases. Only the most urgent symptoms of prostration should cause us to prescribe alcoholic preparations. In certain cases, pure brandy acts well and should be given in 20-drop doses, to which 1 drop of the tincture of strophanthus is added. This dose may be repeated every two to four hours, according to indications. In other patients, we find digitalis indicated. When this is the case, 1-200 to 1-300 grain of digitalin can be given, hypodermically, in the 20 minims of brandy. In cases, in which the patient has cold hands and feet and clammy skin, we have a friend in atropine. The dose should range between 1-1000 and 1-200 grain hypodermically. It may be repeated at four-to six-hours' intervals.

In selecting purgatives for the torpid condition of the bowel, I have learned to rely on two remedies. These are castor-oil and sodium sulphate. Castor-oil may be required repeatedly. Do not be afraid to give it, if retained by the stomach. To a child under two years, 1-2 ounce every ten or twelve hours should be given until there are four or five actions every twenty-four hours. To disguise its taste and cause it to be retained, I have found orange-juice superior to most other agents. In those cases in which

oil faithfully given fails to produce results try a mixture of sodium sulphate, 1 ounce, simple elixir, 1 ounce; water, to make 4 ounces; giving 2 teaspoonfuls every thirty minutes until from four to six doses have been given, according to urgency. It is remarkable what good results may follow the administration of this saline.

I want to emphasize the importance of bowel irrigation or colonic flushing in this condition. As long as the fever, prostration, and bowel inactivity persist, it is necessary to continue the irrigation. It is a measure of great value both for its immediate effect and for increasing general peristalsis, to aid in emptying the colon or the small intestines. In older children, a most excellent procedure is as follows: After the colon has been flushed with physiologic salt-solution at a temperature ranging between 94° and 98° F., introduce the colon-tube as far up as possible, then gently let 8 ounces of water flow in; the water should not be warmer than 60° F. The tube then is immediately removed and an attempt is made, by elevating the buttocks and pressing them together, to have the child retain the fluid as long as possible. If retained for even but a few minutes, it is remarkable what good results may follow.

If we are introducing fluids to be absorbed, to supply the tissue or for nutriment, it should be introduced warm; 100° F. being the right temperature. If to excite peristalsis, use cold.

C. W. CANAN.

Orkney Springs, Va.

#### PRAISE OF LOBELIA BY A THOMSONIAN

Kindly permit me to offer a few comments on brother Canan's article in the March issue (p. 200) of your good journal. First of all, I do not think that he is promulgating any new discovery at all for we physio-medicals and also the eclectic physicians have been using this drug lobelia for a long time—ever since they put poor old Mr. Thomson in jail, saying that he poisoned people with it.

I want to say that the right preparation of lobelia given in proper doses is not a dangerous drug, and I defy any man to prove that anybody ever has been poisoned fatally with lobelia; it is not a chemical poison. True, in overdoses, it will produce alarming symptoms; however, I, myself, have taken as high as 1 ounce of the fluid extract at one time and am quite alive. I have been giving lobelia for the past seven years or longer and now make



the bold assertion that with lobelia, capsicum, ginger, and bayberry in my saddlebags I can show as good results as any doctor that prescribes strychnine, dynamite, and arsenic.

Doctor Canan has stumbled on the truth. To a certain extent, lobelia is a vascular relaxant, depressant in overdoses, while a better antispasmodic remedy has never been discovered in all nature, whether in mineral or the botanical kingdom. The best preparation of the drug is the fluid extract; however, for quick action, give lobeline sulphate hypodermically, or you may use Lloyd's specific medicine. If you want a more powerful form than the ordinary fluid extract, then use the fluid extract of the seed. Is it not the seed from which the alkaloid lobeline is obtained?

The trouble is, that the practitioners of the regular school will not take the truth, with a grain of salt, and proceed to try this drug. Instead, they cry "Poison! Poison!"

Once more I assert, lobelia in no way is a chemical poison. I should like to ask how many people or patients Doctor Canan has seen killed with it? Does anybody answer? Of course, the drug must not be given when not indicated. If the doctors would give it, in suitable combination, in the conditions in which it is indicated, and quit giving strychnine in pneumonia, to whip up the heart, they would not have so many heart failures, as their patients would not smother to death. Very few cases of pneumonia call for a heart stimulant; still, if indicated, administer Lloyd's cactus.

Talk about asthma! They used to say that all that lobelia was good for was asthma. Yes, it is good for that, but, there are dozens of other conditions for which it is even better adapted. Why not give some cactus with it in asthma, and give to effect? For, the only way in which you can give relief in asthma some times, is, to produce emesis; and as an emetic nothing can beat lobelia.

Did you ever run across an oldfashioned case of bellyache? The patient, of course, would rather have it called congestion. Oh, you just give them a hypodermic injection of morphine—that's so very simple! But, let me tell you how to clean a fellow out (provided he is good and husky).

First get him to drink 4 pints of hot water, then toward the last, give him, in a little hot water, say 1-2 teaspoonful of Thomson's composition.<sup>1</sup> That will warm up his stomach. Then proceed to give him an enema of 3 or 4 quarts of water, to which has been added 4 ounces of fluid extract of lobelia

inflata—or only 2 ounces, if you are afraid of any poisonous effects. (Bosh!) Give it as hot as the patient can bear it, through a 30-inch colon-tube, and let the patient retain the injection for five or ten minutes. Be careful when you dip the patient too much, for he will vomit, purge, and perspire all at the same time. If he continues to retch, keep his stomach full of hot water and he will come out all right. His bellyache will be gone in about 90 percent of the cases. Then give, say, half a bottleful of Abbott's saline laxative. By the time he gets that through his alimentary canal it will be scrupulously clean; that is, as nearly completely clean as it can be made. Horse treatment? Well, you just try it, and note results.

Let me tell you of a fever-medicine that has got all your aconite beat to death, and you can give it to effect. Mix 1-2 ounce of fluid extract of lobelia, 1-2 oz. of fluid extract of Jamaica ginger, and 3 ounces of fluid extract of pleurisy-root and of this give 15 to 30 drops fifteen to thirty minutes apart. Give to effect, that is, until there is free perspiration. This [inducing perspiration?—Ed.] is all you can do for any fever, with a fever-medicine. If vomiting should happen to occur (this is not depressing!) then back up, reduce the dose or wash out the stomach with hot water.

For pneumonia, I always use calcium iodide. Some other time I will give my treatment for pneumonia, if anyone wishes to know it. Also, I can tell you things about lobelia in various combinations.

I have had but one case of angina, and this I calmed with the cleanout method as described above. What better combination can be used than the oldfashioned stillingia croup-mixture, consisting of oil of stillingia and oil of cajuput? Alternate this with calcium iodide, a dose each hour. Try it, Brother.

I want to say that I have never given an injection of antitoxin. It may be all right. I know of one of my old professors, who gave 1 pint, by rectum, of the fluid extract of lobelia-seed, and the patient recovered. [Because or despite?—Ed.] This was a bad case of puerperal eclampsia. You can not beat lobelia for controlling spasms. As a rule, I administer it by rectum, mixed with

<sup>1</sup> By this, presumably Doctor Goodrich refers to what popularly is known as "composition powder," for which the formula in this writer's hands since 1870 is as follows:

Myrrh, ozs. 16; ginger, ozs. 8; capsicum, oz. 1; clover, oz. 1; cinnamon, oz. 1. All in fine powder.

Another formula, taken from "The Standard Formulary," reads: Bayberry root-bark, ozs. 12; ginger, gr. 6; capsicum, oz. 1; clover, oz. 1.

hot water. You want to try Thomson's methods.

Lobelia compound,<sup>3</sup> by rectum is indicated when life is in the balance. I give about 1 ounce in 3 quarts of water. That will start the bowels quickly.

To control vomiting in pregnancy, give from 1 to 5 drops of the fluid extract, in water, fifteen minutes apart. If this fails me, I give Wm. R. Warner's ingluvin. Why not use lobelia and about 5 pints of hot water to wash out the stomach? Add some of Thomson's composition powder, if you do not want it to be too depressing.

W. RAY GOODRICH.

Burnt Prairie, Ill.

[Doctor Goodrich's faith in lobelia evidently is the outcome of a wide practical experience with this valuable drug. Undoubtedly, lobelia has been and is being used far too little and is certain to prove of value in many conditions in which an effective antispasmodic is called for. This becomes evident on reading the results of animal-experiments with lobeline reported by G. R. Browne in *CLINICAL MEDICINE* for 1916, page 678. With increasing experience, this interesting remedy will become better known and more widely prescribed.—Ed.]

#### ANNUAL MEETING OF THE ALIENISTS AND NEUROLOGISTS

The annual meeting of the alienists and neurologists will be held in Chicago on Monday, July 9, to Thursday, July 12, in the Red Room of the LaSalle Hotel, under the auspices of the Chicago Medical Society. Dr. George A. Zeller will act as chairman. The program will be mailed June 28, with abstract of each paper. Contributions to the program are solicited. This is a society without a membership-fee. Address, Secretary Alienists and Neurologists, Room 1218, 30 North Michigan Avenue, Chicago, Ill.

#### THE ADVERTISING PAGES

So many deservedly nice things are said about the reading pages of *CLINICAL MEDICINE* that it would be carrying coals to Newcastle if I were to write on the same subject, but there is one point that I wish to make

<sup>3</sup> "The Standard Formulary" gives this formula for "compound lobelia powder (also known as 'emetic powder')": Lobelia, herb, grs. 60; ipecac, grs. 40; bloodroot, grs. 30; skunk-cabbage, grs. 20; capsicum, grs. 10.

Another mixture, known as "the third preparation of lobelia," has this composition: Lobelia-seed, oss. 2; capsicum, oss. 2; cyripedium, oz. 1; No. 6 (tincture of capsicum and myrrh), oss. 16. Shake mixture.

with reference to the helpfulness of *CLINICAL MEDICINE* which has been granted, time and time again, to me and, I am sure, to all other readers of the journal; I refer to the great value of the advertising department.

It is hardly necessary to point out that it is not sufficient for the physician to study the reading pages of his medical journals, to learn new facts and to find confirmed old knowledge. It is also necessary for him to be informed of the sources of supply from which he can obtain many things that he finds of need and of service in his practice, and others that are newly advocated by different writers.

In examining carefully the advertisements printed in *CLINICAL MEDICINE*, the conclusion is unavoidable that this department is conducted with a remarkable degree of care and skill, and one cannot but admire the great amount of practical information that is to be found in these pages. Attention is called there to the latest advances in practical medicine, in dietetics, hygiene, sanitation, not less to important publications and to many various apparatus, contrivances and means designed to enable the physician to improve the quality and efficiency of his work.

Evidently, the advertisements in a carefully conducted medical journal like *CLINICAL MEDICINE* are selected and arranged with the purpose of bringing to the attention of the physician the latest and best helps that are manufactured for his use, and to make him familiar with manufacturing firms whose claims have been proved to be just. If we express our appreciation of *CLINICAL MEDICINE* as a medical journal it is necessary to include the advertising department in our laudatory remarks.

JAMES ROSS.

Chicago, Ill.

#### A PRESSING QUESTION: SHALL WE USE OUR GRAIN FOR BREAD OR FOR BEER?

Here is a little editorial which appeared in the *Weekly Bulletin of the Department of Health of the City of New York*. Read it. It will open your eyes. Out of this great war much good will come, but one of the best things which can possibly result will be the elimination of alcohol as a beverage:

"Last year approximately 3,000,000 tons of grain were used in breweries and distilleries. Most of this was millable grain. Careful calculations show that each million tons of grain is sufficient to supply a one-pound loaf

of bread daily to six million people. Moreover, the fact must not be overlooked that the conversion of grain into alcohol, rather than into bread, represents a distinct loss of 50,000 tons of protein, for each million tons of grain.

"No amount of sophistry regarding the food value of alcohol can overcome the fact of this absolute waste of an essential constituent of our food. Nor can it be contended that the protein of the grain is conserved by being converted into beef through the feeding of brewers' grain to cattle. The proportion thus salvaged has been allowed for in our calculations. The fact remains that the amount of protein irretrievably wasted in this country annually through the conversion of the grain into alcohol represents the protein needs of six million people for one year.

"How much longer can we afford to waste valuable food materials on such an appalling scale!"

#### CHARITY

There was a wealthy Mrs. Brown

Who had few friends and less renown.

Into the lime light she must get

But how she had not thought as yet.

All day she thought and half the night

To find how she could change her plight.

And later this she made her vow—

"To charity I'll make my bow.

"I'll help the poor and heal the ill.

"For clinics shall I make my will."

She chose a house and altered it

So for the work it was quite fit.

Then desks and chairs and drugs she bought

And other things, and then she thought

That Miss Butinski Busybee

Was just the one—yes she could see

That Miss Butinski was the one

To add the touch and give the tone

That this great work ought to possess

And for this she should get not less

Than several hundred dollars per.

Of course the dear would much prefer

To be the manager for Brown

Than just a typist way down town.

For here she'd do a work of love—

(Hush, don't tell that the pay 's above

The income of stenographer

You might insult and anger her)

Nurses and orderlies she sought

And comforts for the sick were brought.

When all was ready to begin

To offset carelessness and sin

It came into the mind of Brown

And thus crept out into a frown,

She had not calculated right

She was again in a sad plight.

The sum she planned to spend each year

Was pretty large, things were so dear,

And every cents was taken now

So Mrs. Brown was puzzled how

To execute this enterprise

For she possessed no Doctor wise.

"Oh well," said she, "It matters not

Whether he 's paid or whether not."

So Nurse and Manager she paid

And orderlies and every maid.

But for a Doctor she obtained

A skillful man and one well trained.

A worker hard, of good intent

Who had to scramble for his rent.

And so the clinic thrived and grew

And every one in town soon knew

Of Mrs. Brown, the wondrous dame

Who gave for love and hated fame.

And Miss Butinski Busybee

Was just as busy as could be

For it was ever up to her

To earn her several hundreds per.

She thought of ways and means galore.

She made her records by the score,

And gleaned much data, talked much guff,

Mostly useless, worthless stuff.

And every day the Doctor worked.

Kept all the rules, no duty shirked.

But for his work he'll get his pay

When he appears on Judgment Day.

While Mrs. Brown with face so grave

Says to her Hippocratic slave—

"You're doing a grand work, my dear."

And sheds a hypocrite's dry tear.

WILLIS M. GARDNER, B. S., M., D.

Brooklyn, N. Y.

[In a letter received from Dr. Willis M. Gardner, he complains that some alterations, made in the proofreading or editing of his poem (April, p. 312), have perverted the meaning intended to be conveyed. Consequently, in justice to the author, we reprint the same, unedited, exactly as it appears in his typewritten copy—with due apologies.—Ed.]

#### DOSIMETRIC TREATMENT NOT ADVERSE TO OLD-SCHOOL TEACHINGS

As you know, I have been a reader of your journal for the last few years, but, being a graduate of the old school, it seems hard for me to break away from its teachings; it is only recently that I have had the nerve and courage to experiment, as I thought, on some of my patients, with the alkaloids.

I appreciate the journal very much. I read it, always. Also, I have carefully perused Doctor French's book, "Active-Principle Therapeutics," and have often thought that the various satisfactory results of outlined treatment of the different diseases, clearly expressed by the authors, made good reading; however, when I got a hold of those little granules, I could not, for the life of me figure how the result could be so satisfactory. They seemed so small! Nevertheless, I have tried them, and must confess that, so far, I

am *very much delighted* and intend to keep on trying a few more every day.

SYDNEY TALBOT.

Nevada City, Calif.

[Our correspondent's experience with alkaloidal remedies duplicates that of so many physicians who first hesitated to adopt this form of drug-treatment, that it may be well to comment upon it.

Being a graduate of the old school, it seems hard for Doctor Talbot to break away from its teachings and that only recently he could work up the nerve and courage to "experiment" on some patients with the alkaloidal granules. As a matter of fact, all members of the editorial cabinet of CLINICAL MEDICINE are "old-school" graduates, the Editor-in-Chief, Doctor Abbott, hailing from Ann Arbor, Michigan, one member of the staff being a son of Rush, another one a Harvard man. Still other members of the staff are graduates of different, but all "old-school" medical colleges.

Moreover, the active principles of drugs were put into clinical use by "old-school" physicians, and the originator of the dosimetric-method of treatment (*not* "school") was professor of surgery in Ghent. As an "old-school" physician, Burggraave never desired to found any separate sect. Doctors Abbott and Waugh, who were among the foremost supporters of alkaloidal materia medica in this country, steadfastly and constantly have insisted that the positive treatment of disease-conditions by means of alkaloids and other positive remedies is just "medicine" and does not represent any new school of healing.

In following up the literature carefully, as can easily be done with the aid of *The Journal of the American Medical Association* (abstract department), frequent accounts of studies of alkaloids will be found, many of which are abstracted also in CLINICAL MEDICINE. *The Journal of Pharmacology and Experimental Therapeutics*, published in Baltimore, and edited by several Johns Hopkins men, frequently contains accounts of investigations made for the purpose of ascertaining the action of active principles. Quite recently, several interesting articles on papaverine have appeared in that journal. H. A. Hare, H. C. Wood, and other writers of textbooks on materia medica and therapeutics give detailed accounts on the alkaloids, and, come to think of it, it is quite impossible to study the action of any drug with any degree of exactness unless its active principles can be isolated

and investigated separately and individually.

Therefore, the clinical use of alkaloids, as well as of other active principles (resins, glucosides, and the like) does not constitute any departure from the teachings of the so-called "old school," but, rather, it is in keeping with its best traditions.—Ed.]

#### A CURE FOR THE VOMITING OF PREGNANCY

Here is a little item that may interest some of our brothers in the healing-art, concerning a simple way to control and cure and stop vomiting in pregnant women: All you have to do is, to paint the os uteri with tincture of iodine. One application generally is all that is required and in most instances it acts like magic. One of my patients, who had been vomiting for over six weeks and was literally worn out, was completely cured in two hours. I have used this measure repeatedly, and it has done the work every time, so far, so that I never had to repeat the application.

M. E. JOHNSON.

Pittsburg, Kan.

#### DIET AND CLIMATE IN NEPHRITIS

It is not so long ago that we thought a pure-milk diet a panacea for all diseases of the kidneys, especially for acute nephritis. The war has given us, in the many cases of "war-nephritis," a number of new experiences, and at the same time has proven many old ones.

Most of the physicians have given up the exclusive milk diet. Milk is very albuminous, which the kidneys can tolerate just as little as the salty food. In the *Medizinische Klinik*, Professor Hirschfeld tells us that he obtained the best results when he diminished the albumen in the food daily to 40 Grams (about 3 ounces) and limited the salt to no more than 5 Grams (about 1 1/4 drams) in a day. His kidney-food was mainly cream, sugar, potatoes, rice, butter, bread, vegetables, and fruit.

Hirschfeld also found that sun-heat can bring on a speedy recovery. Having had experiences to show that in Egypt kidney diseases improve very quickly, he let his patients lie in the sun first two, then four, and at last eight hours a day, or he let them do light garden work. The results were very favorable. Perspiration in the sunlight relieves the kidneys and seems to influence the nephritis favorably in other ways. Hot baths did not have such good results, in fact, seemed to irritate the kidneys. Therefore,

to provide our patients with an Egyptian climate, we have to resort to an artificial zenith-sun.

Niles, Mich.

D. ZWIGTMAN.

#### AN OCCUPATIONAL THERAPY NUMBER

*The Modern Hospital* (Chicago and St. Louis) announces that its June issue will be devoted to the subject of occupational therapy and occupations for the handicapped. The importance of this subject has not been sufficiently realized until comparatively recent times. Of late, the nations at war have come to recognize the therapeutic and economic necessity of providing suitable occupations for those of their wounded and injured who are able to work. This necessity is just as urgent in the case of the handicapped class in civil life.

Another important feature of the June issue of *The Modern Hospital* is to be a paper prepared under the auspices of the department of nursing, Teachers College, Columbia University, on the standardization of records in training-schools for nurses. This is work for which there has long been a crying need. It is believed that the system outlined in this paper will be of epoch-making importance in nursing-education.

#### LEGISLATION AGAINST WOOD-ALCOHOL

In view of the enormous amounts of cheap perfumes, toilet preparations and, no doubt, some drinks that contain wood-alcohol, or "Columbian spirits", I think the enclosed is an excellent bill. If you agree with me, would it be fair to ask your readers to write their representatives at Springfield, asking them to support it?

I urged the passage of a similar bill in the Chicago city council a few years ago and it passed, but in the rest of the state of Illinois preparations containing this deadly poison still may be sold, without any restrictions.

ROBERT C. MURPHY.

Mt. Greenwood, Ill.

[Our correspondent encloses copy of a bill for an act to revise the law in relation to criminal jurisprudence, in force since July 1, 1874, by adding a new section dealing with the sale of wood-alcohol. We cordially agree with our correspondent that such a measure is desirable, and we hope that all Illinois physicians will urge their representatives in Springfield to vote for its passage. The per-

manent section of the proposed bill is as follows:

"Section 63a. No person, firm or corporation shall have in possession, sell or offer for sale any food or drink which contains methyl-alcohol (commonly known as wood-alcohol) or any preparation or mixture of any kind whatever containing methyl-alcohol which shall be intended for internal use by man.

"Any preparation or mixture containing methyl-alcohol intended for external use by man or so used shall, when offered for sale, sold, delivered or used, be conspicuously labeled 'Wood-Alcohol' or 'This preparation contains wood-alcohol,' and bear the word 'Poison,' together with a skull and crossbones. The word 'Poison' and the skull and crossbones shall be printed in red ink and shall be at least one-quarter (1-4) of an inch in height.

"Any person, firm or corporation violating the provisions of this section shall be fined not less than five dollars (\$5.00) nor more than one hundred dollars (\$100.00) for each such offense."—Ed.]

#### SALICYLIC ACID FOR FURUNCULOSIS AND OTHER DERMATIC PUS INFECTIONS

The following practical article by Doctor Berkenbusch, we translate, in substance, from the *Therapeutische Monatshefte*.

Certain chemical substances are specifically inimical to particular microorganisms, as, salvarsan (and the like) to spirochetes, quinine to plasmodia, optochin (methylenhydrocuprein) to pneumococcic diplococci, methylen-blue to streptococci, boric acid to bacteria pyocyanæa, and so on, and to this list Berkenbusch would add salicylic acid against micrococci, especially the pyogenetic; which judgment, while not supported microscopically, is based upon a large experience of many years in the treatment of furuncles, carbuncles, eczema, impetigo, phlegmons, and the follicular angina. Moreover, salicylic acid is our specific for acute articular rheumatism, in which the micrococcus pyogenes is considered the inciter.

As a matter of fact, salicylic acid has been undeservedly neglected as an antiseptic, despite its freedom from odor and toxicity, and its comparing favorably with mercuric chloride. True, escharotic properties are ascribed to it and its strong (notably alcoholic) solutions, but, this action consists merely in a softening of the superficial



especially keratic layer of pavement epithelium; it does not affect the underlying tissues nor wound granulations. As a solvent for the horny corns and calluses, it has been in use for many years, the ointment form being best for that purpose. A convenient form of employing it is, to have on hand a 10-percent solution in alcohol, and to mix 10 volumes of this with 500 volumes of water. This dilute solution of salicylic acid constitutes an excellent wet dressing, in the place of other popular solutions for phlegmons, panaritias, and so on. True, it strongly softens the epidermis, but it does no harm.

Particularly good results have been obtained with a 10-percent ointment (any base) in furuncles and carbuncles, where the germ-killing and horn-solving qualities both come into action.

Since a furuncle consists in an inflammation of a hair-follicle caused by pus-cocci, the extension of the process frequently can be arrested, in its first stage, by extracting the hair from the infected follicle, thus letting out the droplet of pus. However, the physician does not often see the infection in this early stage. When the process is further advanced, the orifice of the follicle is closed by a scab, thus favoring the extension of the inflammation downward, while the hair, as a rule, falls out by itself.

Here, the salicylic acid comes into play. A bit of linen is thickly spread with the 10-percent ointment and fixed in place with adhesive plaster. Soon the scab is softened, whereupon the confined pus can escape. A salicylic or mercury plaster would do the same, however, the ointment is more effective; moreover, the coccidic action of the acid covering the surrounding area prevents fresh inoculation of the skin by the exuding pus—one of the annoyances plaguing the attendant. This simple expedient is far more effective in obviating multiple furuncles and carbuncles (which latter merely are multiplied deeply penetrating furuncles) than the internal administration of "blood-purifiers" or yeast preparations or bacterins. Moreover, re-inoculation by the manipulations of the subject himself is guarded against.

The salicylic dressing is renewed every day, until the necrotic plug can readily be removed (which will be much easier than ordinarily) by means of pincers or gentle pressure; at times, of course, the opening first having been widened, more or less, with a bistoury. However, the customary incision at the start of treatment or cauterization is obviated by the use of this salve. When the

area is somewhat large or in the after-treatment of carbuncles, boric-acid ointment, which may contain 2 percent of salicylic acid, is substituted. In more severe cases of inflammation, it is better to alternate the salicylic salve with a salicylic wet dressing, as above described. The latter must be covered with impervious material and renewed once a day.

As intimated in the beginning, the same treatment proves equally effective in other kinds of pus-infections of the skin—eczema, impetigo, and so forth. Indeed, the good results obtained with Lassar's salicylic paste depend upon its 2 percent of the acid, but, it is too weak, under most circumstances. The profession is warmly urged by the author to give this suggestion a faithful trial.

#### BRODNAX'S ACID IRON TONIC.—MALARIA.—BEATING DEADBEATS

Happening to read up in volume 2 of "American Alkalometry," I came across the article by Doctor Brodnax, on page 756, in which he writes about his acid iron tonic. I want to say now that I have given the formula a thorough trial during more than ten years on the Trinity River bottoms and the Mississippi River bottoms (where I have had all the experience I am looking for in the treatment of malaria), and I have been disappointed but a few times by this remedy. Moreover, while efficacious, it is cheap, and, where the doctor has to furnish the medicine, that point is not to be overlooked.

I bank on quinine, but even that disappoints me at times, and then I fall back on the Brodnax tonic. I have found Warburg's tincture a friend in need, also. For the benefit of the "family", I wish you would publish the Brodnax formula, adding suitable comments. I dispense the preparation in the dosage suggested, using sweetened water as a vehicle.

I have used emetine and pituitrin in the treatment of hematuria, with gratifying results. Of course, I did not forget the slogan, "Clean out, clean up, and keep clean."

Some time, this spring, I hope you will give us some articles on malaria by some of our leading southern physicians. I have been to the northern clinics and find that the teachings by these professors, concerning the treatment of malaria, does not coincide with what I was taught in college by men who had treated this disease for years in and about Memphis. Those men spoke from their experience, while in Chicago I learned

nothing new, as what I was told there could be gleaned from any standard work on practice written by some eminent author with a hospital experience, but who never witnessed a genuine case of "swamp-fever" along the lakes and islands of the Father of Waters. Give us some real practical reliable articles on malaria. With all due respect to the learned teachers in the clinics of the great medical centers of the North, I maintain that these men do not know whereof they speak on this subject, be they ever so wise on others.

The profession of Lauderdale County is well organized and each year we publish a "black-list" like the one I enclose. For instance, on page 17, the first name is Dick M—. Before this name is the number 26 and a little (c) after it. The (c) denotes that this is a gentleman of color; in other words, a negro. By referring to the last page, you will see from the 26 that Dr. G. B. W. is the doctor and that this negro owes him and will not pay. This negro can buy a new buggy or a horse and wear better clothes than the doctor; his wife can buy an organ; they keep a dozen dogs; they can drink all the whisky they want; they have money for all their wants—but not a cent for the doctor. Now, I say to Dick, when he asks me to see his wife: "Dick, you owe Doctor W—, and have been owing him for some time. You are able to pay, but have not done so. Now go to Doctor W—, get his receipt for what you owe him, and then I shall gladly attend your wife." And, unless he gets a receipt or a release from that doctor, Dick M— can not get a doctor in this county (even for cash) to go to see his wife.

Of course, we do not put down the names of people who are unfortunate and can not pay; but, we go after the ones who can but will not, and we go in a way that brings them "across" sooner or later, if they stay in this county. Furthermore, we will not consult with a doctor who comes to our county until he joins our association.

It goes without saying that we are allowed to go in an emergency to see one whose name is on the list, but to make only one visit; and while there inform him of the fact, and thus give him time to make satisfactory arrangements with the doctor who put his name on the list.

We also help collect accounts for our fellow practitioners. Last mail I received a check for \$2.00 that Doctor D— collected from a negro named Walter W—, who owed me two years and who would not pay up. His child needed a physician and Walter went

for Doctor D—, and the Doctor promptly refused to go and see the child until he had paid him the money he owed me.

I suggest that you give our plan a write-up for other county societies to copy. I want to see other medical societies adopt it and benefit from it. The delinquent-lists are gotten out at about the close of each winter.

R. B. KILPATRICK.

Gold Dust, Tenn.

[The formula for Doctor Brodnax's acid iron tonic, to which Doctor Kilpatrick refers, is as follows: Nitric acid, oz. 1; hydrochloric acid, oz. 1; ferrous sulphate, grs. 160. Mix and set aside for twenty-four hours, when it is ready for use. Dose: 2 to 10 drops, according to age, diluted in plenty of water, to suit the taste, three to six times a day, as a drink.

A mutual protective plan very similar to the one described by Doctor Kilpatrick is in full operation in Peterboro, New Hampshire, and is yielding very satisfactory results, according to a letter by Dr. F. B. Foster in *The Medical Council* for March.

The four physicians of that little New Hampshire town tired of doing all the medical work for the people who had money to smoke good cigars, drink rum and take themselves and their families to the movies twice a week, while there was none to pay the doctor. So, they got together and arranged a delinquent-list; and, incidentally, they raised their fees. Most important of all, these four men lived up to their agreement to the letter. The result is, that they are all making more money than ever before, since they now get better fees and have no more bad debts. Also, having become truly acquainted with each other, they have become excellent friends and cooperate in their work, to their great personal advantage as well as to that of their patients.

This plan of a delinquent-list, as described by Doctor Kilpatrick and by Doctor Foster, is an excellent one; especially since the agreement does not deprive the "worthy poor" of medical services and does not affect the professional attendance in cases of accident or emergency. It would be well for physicians in other small towns or in country districts to make use of these suggestions; for, in this manner the individual physicians would benefit materially, while incidentally, deriving additional advantages from closer cooperation with their fellow practitioners. As Doctor Foster puts it:

"The people have learned that we are not fighting among ourselves, and they respect us

for it. . . . We four men have learned to know one another and to discard all throat-cutting and covert sneers, one toward another. We meet each other on the most friendly footing, and the Homeopath is regarded on equal terms with his regular brothers. In other words, we are living as physicians ought to live, each one helping the other along; each one acting as an incentive to his colleague to brace up, do his share of the work, and do it well.—"Ed.]

#### ANOTHER INVITATION TO TROPICAL AMERICA BY HOLLMANN

Not until yesterday, February 25, did I receive a copy of the November issue of *CLINICAL MEDICINE* and have read with curiosity Doctor Mayo's sombre picture of the American tropics. His article stirred and conjured up old memories of similar experiences in the past, and perhaps of present times as well; only custom deadens perception and causes the strangeness to vanish.

Doctor Mayo "has been there" and his picture is well drawn; only, I do not always see the dark side as long as there is a bright side, too, and I am always looking for the sunny side in life and men.

Somehow, I had a dim idea of the obstacles Doctor Mayo so humoristically throws on the screen. For this reason, I visited the United States, where I found men who are willing to help overcome these disagreeable features by making a port, building a wharf and a railroad, and helping the new people along in other ways.

I realized, after receiving so many letters, that it would be rather difficult for many to wait five or six years for the first cacao crop. But with steamboats coming in to take away the products of the settlers there will be a splendid income assured from bananas, plantains, pineapple, citrus fruit, sugar-cane, and meats of all kinds, since corn, growing luxuriantly, is cheap and plentiful. And rice here is considered the best in the world and is produced cheaper and with far less labor than anywhere in the world.

So, now I have been all this time in this capital city, working to get the necessary concession from this government, and I am glad to be able to state that work may be started on the proposed port in from six months to a year from now.

Then we shall be enabled to eliminate many of the hardships Doctor Mayo mentions. For instance, we shall bring down cook-stoves,

so we can prepare our food in the good old American way. And, as corn is not dear, we shall cut out the leaves of the rubber-tree as a diet for fowls, turkey in particular, and fatten them on corn, as we do in America. A good idea, too, is to bring down some pumpkin-seed. Last year I planted some crooknecks and hubbards. Nothing mestizo about those pumpkins, I can tell you. I don't believe that pie story, though, do you? You see, when I had a wife—God bless her—she would exercise some vigilance over the cook during the important process of pie building, as she used to say that I had an extraordinarily beautiful mouth for pie. And, believe me, I never have seen a bad pie on my table.

A colony can do things that an individual can not. We can build churches, school, library, a dance-hall for the young people, while gasolin, in conjunction with plenty of river water, facilitates communication with the outer world.

Now, it seems to me that the editor hit the nail right square on the head when he advised someone to come down and look for himself. Two or three together would be still better. Let me know beforehand, so as to meet you. I am nearly through with my errand here now and soon shall leave for the coast again. So, come and look and tell the rest all about it.

A. R. HOLLMANN.

Tegucigalpa, Honduras.

[While we print Doctor Hollmann's article, it is with the advice, already made in these columns, to *go and see* before investing—especially before moving to Honduras or to any other new country.—Ed.]

#### PNEUMONIA IS A SELF-LIMITED DISEASE AND THE TREATMENT IS SYMPTOMATIC

I do not want to appear in the role of an authority nor do I want to be classed as a therapeutic nihilist, but, I do want to write from personal experience and observation.

I am treating, and have treated, quite a number of cases of pneumonia. What I call pneumonia is a case where you find the specific offending germ. Why I say it is self-limited, is, because in nine cases of ten in my practice I found that in each and every instance there was the crisis on the 5th, 9th, and, in some cases a delayed crisis, the 14th day. If pneumonia is not self-

limited, why do all the symptoms disappear after a certain period?

I believe more in the preventive than I do in the abortive treatment of the disease. Mild attacks of all diseases run a much shorter and less severe course. Then, too, you have to consider the vitality of the patient. A patient whose vitality is low, and where the hygienic surroundings are bad, fares poorly in any attack of disease, and in that patient I look for a very pronounced or delayed crisis, which will occur (if the infection is not fatal) on the 5th, 7th, 9th or 14th day. I have tried to cut short the disease in every case, but, in my hands, it seemed that despite all my efforts it would run its course in favorable cases and terminate at certain set and allotted times.

I try to be progressive; I read articles on the disease and feel that, if I were to carry out the things that the writer suggested, I would cut short the attack; but, when I employ the same suggested treatment, I feel myself sparring for the crisis on the dates mentioned.

Am I at fault? Is my treatment obsolete? Is pneumonia pneumonia wherever you find it? Have I erred in my diagnosis? I am sincere, because I believe that pneumonia is a forerunner of fatal lung diseases.

Now just a word about abortive treatment. I believe that all diseases, or most of them, can be aborted if the symptoms of a given disease can be diagnosed in its incipency; but, so many diseases require laboratory findings, for diagnosis, which sometimes consume two or three days, and the disease is progressing while you are waiting.

Therefore, as soon as your diagnosis is assured, you have a well-developed disease to combat; and this, I believe, will depend upon the virulence of the attack as to whether the case or disease can be aborted.

What are we going to do specifically? The vaccines are empirical and not specific. Alone, they are failures. I believe in positiveness, but you have not a positive thing to do. You have to rely upon the next-best thing, which is, symptomatic treatment. I believe a great many physicians have to treat nearly all diseases symptomatically, aside from giving mercury and the iodides for syphilis, and, lately, salvarsan and neosalvarsan (sodium cacodylate), and quinine for malaria, with arsenic and iron as adjuncts. Then there are the antitoxins for diphtheria and a few other diseases.

Can we truthfully and conscientiously treat the host of other diseases positively?

Our first aim in every disease is, to clean out the alimentary tract, then to relieve as nearly as possible the condition of the part or parts that are diseased.

Now, in pneumonia, we (or at least I) try to relieve the most severe symptoms: pain in the side, engorgement of lungs, cough, fever; and, to relieve these conditions, I call that symptomatic treatment. Pleurisy is only a symptom or a complication. The cough is a symptom. The fever denotes the virulent intoxication and is not the real cause of the ailment. After you have relieved these conditions and made your patient comfortable, haven't you treated symptoms? I believe in the old German adage, "Meet the stubbornness of the disease with the stubbornness of the treatment," which, as I have found, means symptomatic.

I am willing and ready to lay aside all I have ever done (that is, the methods I have employed for positive therapeutics). This has been my experience. An open confession is what makes us learn from others the things we do not know. I am seeking help. Will you contributors assist?

A. L. SAUNDERS.

Memphis, Tenn.

[It is hardly safe to call "pneumonia" any case "where you find the specific offending germ," for, the various pathogenic bacteria that may give rise to pulmonitis or inflammation of the lung, conveniently designated as pneumonia, may be found in the expectorations of a great many people who are free from any lung lesions.

Nor is it quite correct to say that the symptoms always improve after a certain period, since this depends upon the degree of resistance put forth by the organism to the action of the causative virus. The crisis by no means takes place in every case on the third, ninth or fourteenth day; in some cases, resolution occurs by lysis, and then, of course, some of the cases terminate fatally.

As we understand it, the crisis is that period in the disease in which the resistance of the organism becomes greater than the injurious influences that are responsible for the pulmonary inflammation. According to Emery, this is not because of the formation of antibacterial or antitoxic substances, but, rather, because there is an increase in the opsonic index sufficient to endow the leukocytes with the necessary phagocytic power to engulf and destroy the pneumococci. Since it is possible, by means of certain



remedial agents, to keep the fever of pneumonia within the bounds of safety; and, further, since it is possible likewise to stimulate the opsonic power of the blood—for instance, by the administration of nuclein—the assertion that the course of pneumonia can be influenced by treatment is not unfounded, and it has the support of ample clinical experience.

Doctor Saunders believes that most diseases can be aborted if their symptoms can be diagnosed in their incipency, but that the diseases progress while the laboratory diagnosis is made. With all and every acknowledgment of the value and necessity of laboratory diagnosis wherever this is feasible, we submit that it would be as foolish for the physician to rest his oars pending the decision of the pathologist as it would be for the fireman to withhold the extinguishing stream of water in a case of fire until the temperature of the conflagration has been ascertained by means of exact instruments.

Until the laboratory diagnosis can be made, much may be done symptomatically, inasmuch as in every case of a specific bacterial disease there are certain definite clinical symptoms that indicate to the observing physician the probable cause and the pathological tissue changes that may fairly be supposed to exist. It is possible to take measures by which the fever is prevented from rising to the degree that involves danger; it is possible to relieve distress and pain; and it is possible to support the strength, the vitality and the resistance of the patient who is fighting an acute disease induced by the injurious action of no matter what bacteria.

If Doctor Saunders says that vaccines are empirical, and not specific, we can not follow him, for the reason that in the entire domain of the treatment of disease there is nothing more specific than the direct antibacterial treatment of infectious processes. Immunological researches have shown that the resistance to the harmful action of a certain bacterium is specific, inasmuch as, for instance, antityphoid immune-substances do not influence the viability and vitality of influenza-bacilli, but only that of typhoid-bacilli and possibly of allied-group bacteria.

It follows that a typhoid-bacterin has a direct influence in modifying typhoid fever, but has no effect in cases of influenza, of tuberculosis, of dysentery or any other infectious malady; and so on through the list.

It seems to us that this most certainly constitutes specific therapy, even more than

does the so-called specific therapy of syphilis by means of mercury or of malaria with the aid of quinine. It is quite true that originally vaccine treatment was empirical, and it was based by Jenner upon the observation communicated to him by a milkmaid who had recovered from cowpox and thus acquired immunity to smallpox. Jenner, therefore, conceived the idea of producing cowpox, a relatively harmless disease, artificially, for the sake of protecting the vaccinated person against the more serious smallpox.

By the way, why is it that the term "empirical" seems to carry reproach, and that every medicine or form of treatment characterized by this adjective is thereby laid under a stigma and all but becomes taboo? The word empirical has come to be a bogey to frighten foolish children with. The discerning realize that everything worth while that has ever been invented and discovered has been searched for empirically and is founded on empirical methods.

Undoubtedly, symptomatic treatment is called for in every disease that is associated with phenomena interfering with the patient's comfort, no matter how feasible it may be to treat this same disease specifically; for, there will always be a number of symptoms that can be allayed. Pain is to be relieved, digestive disorders are remedied, distressing perspiration is diminished, restlessness is calmed; in short, every means is resorted to to make the patient as comfortable as possible, and at the same time to enhance his vital powers, and which he needs so fully in his laborious struggle against the malady that his organs are trying to overcome.

In the case of infectious diseases, it would be well for physicians to think in terms of immunity and to reason out the processes that are taking place in the battlefield, first of all, in the organ or organs involved and then in the circulation, since blood and lymph not only are the carriers of infection, but also of resisting forces. It is time that we get away from considering the practice of medicine as dealing with dark, mysterious forces. A great many of its problems have been solved and can be demonstrated, and most of them are susceptible to common sense methods of treatment and management.

It would hardly do to leave the subject without referring to the defervescent treatment of acute fevers, notably pneumonia, which was introduced into practice years ago by Professor Burggraeve. Aconitine together with digitalin and veratrin or, in asthenic cases, aconitine in combination with digitali.



and strychnine have enabled many physicians in unnumbered cases to control the excessive fever-temperatures of an oncoming pneumonia, and with the additional aid of other appropriate measures to strengthen the resisting forces of the organism, to aid in throwing off and eliminating the offending bacterial invasion with its products, so that it has long been the claim and the justified pride of physicians employing dosimetric methods that they are able to abort pneumonia.

Nor would it be just to neglect taking cognizance of the convincing results that are constantly being obtained by the positive treatment of pneumonia in the practice of Professor Solomon Solis Cohen, of Philadelphia. There is, perhaps, no one man in the United States who has had a greater practical experience in the treatment of this disease nor does any one physician deserve the thanks of the medical profession in a greater degree than does Professor Cohen for the definite and lucid discussions on the treatment of pneumonia which he has published in many medical journals. Readers of *CLINICAL MEDICINE* will remember appreciatively the bedside directions for the treatment of acute lobar pneumonia as they are incorporated in an article contributed by Professor Cohen to this journal for February, page 101. Let them reread this important contribution to pneumonia-literature and let them study it with care, because it will aid them greatly in the treatment of this distressing and dangerous malady.—Ed.]

#### THE MILKING-MACHINE AND THE DOCTOR

Of all the numerous foodstuffs produced by the farmer, not one is of such importance as milk; for, milk is very prone to change, it is extremely subject to outside influences, such as surround its production, while its wholesomeness depends upon the avoidance of everything that favors deterioration and contamination with dirt and bacteria. Thus, an ideal method of milk production would be one by which the milk could be transferred from the udder of the cow directly into an aseptic receptacle, without being exposed to air contamination and with the least possible manipulation.

It is several years since the milking-machine was invented, the object of which was, not alone to save labor, but to vouchsafe a clean, uncontaminated product. This in-

vention was a natural outcome of the recognition of the great susceptibility of milk to bacterial influence and the necessity of securing unobjectionable milk, in view of its immense importance as a food, particularly for infants among whom the prevailing excessive mortality largely is due to dietetic causes.

Talks with farmers as well as reading on the subject, have convinced me that the milking-machines on the market, although theoretically excellent, have several serious drawbacks, the principal objection being that they act by suction, by means of an exhaust-pump. Thus it not infrequently happens that a teat is injured and that the powerful suction causes bleeding. However, recently my attention was called to a new milking-machine, designed with a view to imitating, or, in fact, reproducing the actual mechanism by which the calf draws the milk. This natural process is not one of simple and continued suction, but, consists in a periodical compression of the udder and simultaneous intermittent suction. This same method of drawing the milk is imitated by the hands when milking cows; but thus far no machine reproduced this mechanism.

However, this new contrivance of which I speak embodies the principles of natural sucking and is, in fact, superior to hand-milking; for, while the udder is protected from injury, the action is one of intermittent massage and suction. The apparatus is easily adjusted, without any objection on the part of the cow, and the milk flows directly into the closed receptacle through a rubber tube. The mechanism is simple and every part accessible for easy and thorough cleaning.

The advantages of this new milking-machine, it is seen, lie in its sanitary character, since the milk does not come in contact with the hands and is protected from extraneous infection. Besides, it is humane and inflicts no harm. Also, it is economical, for, it does the work of three men—a point that is of no mean importance at the present time, when all able-bodied men of the country are liable to be called to serve with the army. Moreover, this milking machine can be operated easily by a woman, more easily, in fact, than women can attend to many other parts of the farm work. The adoption and use of such a correct milker certainly must interest physicians in their every capacity, as sanitarians, as physicians, and as citizens.

H. J. ACHARD.

Chicago, Ill.

# Just Among Friends

A DEPARTMENT OF GOOD MEDICINE AND GOOD CHEER FOR THE WAYFARING DOCTOR

Conducted by GEORGE F. BUTLER, A. M., M. D.

[Continued from May issue, page 397]

BUT the feature of my book, as conceived, which more than any other perhaps would distinguish it from the ordinary run of text-books on medicine would be, the aggressively personal note that would be struck at the outset and maintained through its pages. For this, I should make no apology whatever. On the contrary, I am frank to declare that it would be my deliberate aim and intent from the very inception of the purpose out of which the idea grew; and I am bold to stake whatever hopes I might have as to its value and helpfulness, not to say its popularity, upon this very feature.

As a cold, impersonal compilation of other men's words and deeds, I could not expect any effort of mine to compete with already existing books of that type from the pens of men to whom I cheerfully concede superiority in that class of work, and for which I confess I have no ambition. Whatever energy I should expend in that direction would be dissipated and such power as I might have would be scattered. But, as a presentation of my own conclusions, forged on the heated anvil of my own personal experience and observations, by my own trial-and-error processes, I feel warranted in believing that my work would prove a vital, worthwhile, and useful contribution to medical literature; that, as it came out of, and was shaped by, my own individual contact with medical practice, so it would enter into, and help to shape for positive good, the individual day-to-day practice of those who might read and assimilate it.

But, dear reader, do not you get excited. I am not going to write a book on the treatment of disease. There was a time when the doctors were interested in this branch of medicine; they are not now. I mean, not very many doctors. The physician nowadays who talks of *treating* anything is looked upon as a "hasbeen" and as not very scientific. This ultrascientific attitude and our own failure to *do* anything for a sick person other than to endeavor to make a diagnosis ac-

counts for the large number of people who have gone over to Christian Science, Osteopathy, and all that stuff—and perhaps they are wise for having done so.

No, doctor, I'll not write a book on treatment, for doctors. I just want to tell you what kind of a book I should write if I were to write one. I may write a book for the laypeople, something about how to live, and then, if they follow my advice, you doctors won't be called upon much to treat them for anything.

The action of remedies naturally falls into two classes, namely: that kind of action which is aimed directly at, and virtually limits itself to, the influencing of some circumscribed part of the body, and which may be termed local action, and that which is designed to exercise itself through the organized mechanism of the body at large, and which may be called general action.

Local Medication: In internal medicine, this phase of remedial action resolves itself into a question of irritation and counter-irritation, based on the fact that, by applying certain agents to one part of the body, thus exciting increased activity there, we are able to reach and influence a wrong at some other part, far removed. This is brought about through the medium either of the nervous or the circulatory supply of the part involved; though usually through the joint agency of these two functional systems.

Irritation: The general circulation is directly affected by cutaneous irritants in two ways: first, by a direct stimulant effect downward to the heart, and, second, by a dilatation of the peripheral arterioles, decreasing the blood pressure in the arteries, thus easing the heart's action.

In collapse, shock or even the typhoid condition, it is an established principle of practice to apply the epispastics to large areas of the surface for a brief period, provided they are rubefacients and not vesicants. Dermal irritants, which act as general

stimulants, are indicated in states of depression (not in advanced exhaustion), and should be applied for a brief period, accompanied by the administration of other stimulants, given freely.

**Counterirritation:** It is self-evident that, if for any reason there is an increased flow of blood to the body surface, there must be a correspondingly decreased supply to the deeper parts; and the reverse. The application of vesicatives or heat to the skin of the chest, for example, after inflammation of the costal pleura, will dilate the cutaneous terminations of the intercostal arteries, decreasing the flow to the pleural arterioles, thus diminishing the vascularity of the inflamed areas. Dilatation of the cutaneous vessels over an articulation is followed by a diminished supply of blood in the articular branches, as well as in the arterial trunk that is common to both.

The nervous system is affected in a similar way. As, in the articulation, both the cutaneous and the deep-seated nerves spring from common trunks, an application of medicinal agents to the peripheral extremities of the superficial distribution has more or less effect on the deep-seated terminations.

**Germicidal Action:** This is a mode of local action which is not yet reducible to exact terms. In so far as they act upon the tissues, increasing their resistance, they belong in the class of irritants and counter-irritants, although precisely in what way they act cannot be definitely determined. To the extent that their action is exerted directly upon the microorganisms, inhibiting their functions, neutralizing their toxins, and in whatever other way, they are not medicines at all, properly speaking, for, they do not influence the body-economy.

**Stimulation and Sedation:** The doctrine of inciting or depressing one or more of the vital functions of the body, in order to "level up" the general state, constitutes to this day, in one form or other, the basic principle of therapeutic practice. Medicine, in this respect, is, in fact, merely an extension of the principles and agencies of normal physiology. The common idea that the use of a drug is, to cure or heal, takes account of only one of its employments—of which, really, there are several, namely: to prevent disease, to prolong life, to assuage pain and other effects of

disease, and to remove abnormal conditions in other ways.

Although the separation between food and drugs is, in one sense, plain, there really is no scientific distinction, the sick person requiring food no less than the healthy one. And, while diseases will, in many instances, call for a modification of the diet, the fact still remains that food is the basis of life, in disease as well as in health. The nutrition is the first essential, medicine coming as an adjunct in those cases in which morbid conditions arise.

**Nature of Disease:** Disease is a disturbance which appears as a group of symptoms, the real, final cause of which never can be reached by fighting any single equation in the long sequence that lies behind it. Yet, true as this is, treatment recognizes each symptom in the group as a part of the wrong to be resisted. In fever, for example, the constipation, the thirst, the dry skin, the headache, the weakened digestion, the depressed action of the heart, each one of these symptoms is to be taken into account as an essential part of the whole disease, and to remove any one of these is, simultaneously, to help in the healing of the entire group of pathologic conditions; so that, to remove them all, would be to remove the disease itself, if not its cause.

**The Microbe:** This view of disease, as just stated, is not invalidated or transcended by the introduction, modernly, of the microbe as a factor in its etiology. Although there remains much yet to be learned about the true relationship of the germ to disease, it is self-evident that, however important a factor in disease the germ may be, it is only a link in a chain of sequences that result in the given manifestations. It is not the disease itself (despite the modern tendency to identify it as such), and it does not of itself cause the disease. It is but a symptom of some morbid antecedent which has endowed it with its evil propensities, either to increase in virulence, once it has entered the tissues, or to induce a diminished resistance on the part of the tissues.

**Symptomatic and Causal Treatment:** Symptomatic and causal treatment are, therefore, in effect, the same kind, every symptom being found, upon tracing it back, to be a cause among other causes, and every cause a symptom. For this reason, the aim of treatment should be, to get at any cause or

symptom that can be readily reached, searching always for the most remote in the chain of logical sequences; for it is upon this that the remedy will have a more far-reaching effect, in that it will thus stop the march of sequences.

It has been held that to treat a symptom is merely to conceal the disease, not to heal it, and that such a mode of procedure is like that of painting the cheeks red in order to hide the effects of anemia. However, genuine symptomatic treatment bears no resemblance to such a course. It would consist, not in painting the cheeks for this disorder, but in prescribing whatever remedy is called for by the circumstances of that particular case to improve the condition of the blood. Whatever the underlying reason for the anemia, the remedy would correct the paleness of the blood and, therefore, the secondary effects that depend upon the lack of the remedy-principle in the corpuscles would disappear. This is, to treat symptomatically.

**Classification and Therapeutic Principles:** In order to accomplish my object in the most simple and lucid manner, I shall group our remedies and consider them together from the point of view of employment. That is, I shall make the disease-indications, the things to be accomplished, the basis of this article, beginning with a subdivision of all therapeutic practice under the following five heads: (1) Elimination. (2) Nutritional balance. (3) Circulatory equilibrium. (4) Asepsis, local and general. (5) Innervation.

In a strictly technical sense, we may say that all of medical practice cannot be included in this list; but, from a practical standpoint, the ground is so well covered that I urge, as a fundamental precaution in every case you treat, a careful consideration on your part of these five points. Find out always, and as soon as possible, (1) whether the patient's eliminative organs are working properly; (2) whether he is receiving proper food, digesting it well, absorbing and using it; (3) whether the circulatory organs are functioning properly; (4) whether there is any infection, local or

general, past or present; (5) whether the nervous system is sound.

**Elimination:** Elimination, which has been called "the cornerstone of successful therapy", occurs through the agency of the bowels, kidneys, lungs, and skin; and it is in this order that I shall take up elimination, beginning with the study of remedies acting on the bowels to increase or decrease activity there. However, a few preliminary considerations are necessary.

**The Significance of Excretion:** In his "Manual of Physiology", Stewart writes: "In a body which is neither increasing nor diminishing in weight, the output must exactly balance the income, and all that enters the body must sooner or later, in however a changed form, escape from it again. In the expired air, the urine, the secretions of the skin and the feces, by far the greater part of the waste products is eliminated. Thus, the carbon of the absorbed solids of the food is chiefly given off as carbonic acid by the lungs; the hydrogen, as water by the kidneys, lungs, and skin, along with the unchanged water of the food; the nitrogen, as urea, by the kidneys. The feces represent chiefly unabsorbed portions of the food. A small and variable contribution is that of the expectorated matter and the secretions of the nasal mucous membrane and the lacrimal glands. Still smaller and still more variable is the loss in the form of dead epidermic scales, hairs, and nails. The discharges from the generative organs are to be considered as secretions, with reference to the parent organism, and so is the milk, and even the fetus itself with respect to the mother."

For many years, we have understood the grave import of malnutrition, but, with the still more serious subjects of faulty elimination and excretion, we have not been so well acquainted. If the various excretory organs do not carry out their functions properly, life is destroyed more rapidly than if ingesta be withheld, and the chronic action of imperfect elimination is a momentous issue.

[To be continued.]

**"P**ERHAPS now more than ever before it is the duty of those who write to continue writing, more and better; and of those who read to continue reading, well and searchingly, so that our spirits may have sustenance in the great material conflict before us."

—SHAN F. BULLOCK

# Among the Books

## NASCHER: "GERIATRICS"

Geriatrics: The Diseases of Old Age and their Treatment, Including Physiological Old Age, Home and Institutional Care, and Medicolegal Relations. By I. L. Nascher, M. D. With an introduction by A. Jacobi, M. D. Second edition, revised. Philadelphia: P. Blakiston's Son & Co., 1916. Price \$5.00.

The fact that human beings as well as all other sentient creatures pass through the periods of youth, maturity, and old age is accepted, generally, as self-evident and without an attempt to inquire into the reason for this evolution; yet, the question why the child develops into a mature man or woman and, more still, why we grow old, is one that must interest everyone, for the reason that none are exempt. Modern methods of prophylaxis, sanitation, hygiene, and dietetics serve to prevent disease, but, they have no influence in prolonging life, aside from the prevention of disease. They can not prevent aging nor can they eliminate old age.

The question why we grow old has been answered variously, but inevitably by recourse to theory. Even the present author's explanation of aging is based on theory, albeit a plausible attempt at an answer to the question.

While, however, it cannot be explained why we grow old, since we do not even know what is life, it is quite possible to study the phenomena associated with the growing old and to become familiar with the peculiarities of old age, with its physiology and its pathology. In many ways, the aged experience objective and subjective departures from wellbeing, dependent upon their being aged, for which they desire relief, but which can not be remedied or, at least, mitigated without an exact knowledge of the "normal", that is, average aged organism, its power of resistance and, perchance, of repair. For, as Doctor Jacobi declares in his introduction to this volume, the individual has a justifiable claim to comparative health, persistent comfort, and uninterrupted efficiency.

It is Doctor Nascher's merit to have popularized the study of diseases peculiar to

the aged and to have thrown light upon many disease-states that hitherto were very likely to be put aside, with the ancient "chestnut" about the "wornout machinery". The author of this book, the second edition of which was called for only two years after the appearance of the first, shows conclusively, in his study of the physiology and of the pathology of old age, that this timeworn simile does not fit, but that diseases and imperfections of old people are grounded in peculiarities in structure and in function of the aged organism. It is not an attractive picture that he draws of old age; not one that appeals to us in the same manner as does the trusting helplessness of infancy. Yet, there is a relative helplessness, which must arouse the desire to aid and to support, even though it may be impossible to remedy.

This textbook already has been the means of aiding many physicians to a better understanding of the infirmities of their aged patients, and it is certain to continue its beneficial mission. The arrangement of the subject-matter is somewhat unusual, yet, reasonable and logical; the discussions are interesting, for the reason that the author speaks from a deep knowledge of his subject. It would be futile to attempt a description of the work; but, it is not amiss to assert that it should be studied by every physician, and more particularly by every general practitioner.

## "MEDICAL CLINICS OF CHICAGO"

The Medical Clinics of Chicago. Published bimonthly by The W. B. Saunders Company, of Philadelphia. Price, per year, \$8.00.

Probably one of the most important and practical clinics in the January number (1917, vol. ii) is the one by Dr. Charles Spencer Williamson on splanchnoptosis. Demonstrating 3 patients, all women, whom he had treated successfully several years ago and since then kept under observation, Doctor Williamson presents an unusually graphic discussion of this difficult trouble, which is of far more frequent occurrence than one might think and so often is not recog



nized, the dominating symptoms mostly being accepted as the actual maladies and the patients consequently being treated for "indigestion", "nervousness", and what not. There are few physicians who, on reading this clinical talk, will not be reminded, of several experiences of their own or who will fail to benefit from it in the management of further patients.

#### JELLETT: "GYNECOLOGY"

A Practice of Gynecology. By Henry Jellett, M. D. With 374 illustrations (many in color) and 11 colored plates. Philadelphia: Lea & Febiger. 1916. Price \$6.00.

Doctor Jellett, who is master of the Rotunda Hospital in Dublin, Ireland, has produced a book that is especially acceptable because of the clear and lucid language in which the information is presented; free from unnecessary theorizing, concise, and to the point. The text falls readily into two portions, medical and surgical gynecology, these being separated by an interlude consisting of a chapter on vaccine-treatment in gynecology and one on radiotherapy in gynecology. The book is well printed and beautifully illustrated.

#### FITZGERALD: "ZONE-THERAPY"

Zone-Therapy or Relieving Pain at Home. By Wm. H. Fitzgerald, M. D., and Edwin F. Bowers, M. D. Columbus, Ohio: I. W. Long. 1917. Price, \$1.50.

Doctor Crile's theories concerning "nerve-blocking" have received confirmation, in a manner that probably is quite unexpected by him, in Fitzgerald's method of zone-therapy, which is, the blocking of certain nerve impulses and the preventing them from being recorded in the consciousness of the patient; or, also, the relief of injury done by such nerve impulses and of actual physical pain and other morbid changes by a properly selected and applied method of nerve-blocking.

The little book before us is written in a popular style; nevertheless, it is of interest to the physician, if only for the new application of known facts and, more, for the discovery and development of new ideas. We have known for ages that pressure over an injured bony part may tend to relieve pain. Indeed, we have made use of this fact, in the past, by tenderly pressing upon the aching jaw and, once the course of the nerves supplying the offending teeth had been learned, by exerting pressure upon the nerve. This pro-

cedure, though, was a crude and elementary makeshift in comparison with the method developed by Doctor Fitzgerald for relieving pain and, far more important, to remedy even serious pathological conditions associated with pain.

The relief of headache by pressure appeals to us without further confirmation as quite feasible. The removal of tumors, lymphatic enlargements, and painful glands or goiter merely by pressure upon certain "zones" seemingly without any direct connection therewith makes us smile and shrug our shoulders. But, hold on; so many strange things have happened in the last ten or twenty years, that we have long since given up sneering at things we do not understand. We now try to learn them and at least make an attempt to repeat those things that are asserted to be possible.

A true physician will guard against snap judgment, and against seemingly "foolish" or incongruous assertions; he will investigate, while always maintaining an open mind. Zone-therapy, at first sight, seems a pretty big thing, because its author evidently is a thinking physician, and not a dreamer. Let us investigate it. By all means, buy the book, Doctor; test its teachings and then report to us.

#### PENHALLOW: "MILITARY SURGERY"

Military Surgery. By D. P. Penhallow, S. B., M. D. With Introduction by Sir Alfred Keogh, K. C. B. London: Henry Frowde, Oxford University Press. 1916. Price \$5.00.

This volume of the "Oxford medical publications" certainly is timely, and the more acceptable to American physicians, since the author, a first lieutenant in the Medical Reserve Corps of the U. S. Army, has written it from his actual experience as chief surgeon of an American women's war hospital in England. He also is director of a unit of the American Red Cross European Relief Expedition.

In the preface, the author states that an attempt has been made to describe briefly the different forms of projectiles and the nature of the wounds which they cause, as also the various complications resulting from the different types of wounds. He, further, aims to make plain the principles of treatment which have been found to be most efficacious under the various conditions obtaining. Much of the work has been compiled from observations made at the hospital to which

the author is attached; and, we believe that this personal factor in the writing of the book is of advantage. The volume is certain to prove of especial value at the present time.

**MEISEL-HESS: "THE SEXUAL CRISIS"**

*The Sexual Crisis: A Critique of Our Sexual Life.* By Grete Meisel-Hess. Authorized Translation by Eden and Cedar Paul, with an Introduction by William J. Robinson, M. D. New York: The Critic and Guide Company, 12 Mount Morris Park. 1917. Price \$3.00.

The "sexual crisis," with which this book deals, is not the crisis of the individual; it is rather the problem of the present-day sex relationship growing out of the changing social order. As the author points out, the increasing difficulty of self-maintenance, especially on the part of the male, together with the demand for a more luxurious mode of living, is making marriage and the support of a family more difficult, and, from the standpoint of the individual, less desirable. As a consequence, the satisfaction of the sex instinct necessary for normal and happy living is made impossible for millions of women and fraught with peril for millions of men. Prostitution is the outcome of this overmastering impulse to secure relief. As such, the gifted author looks upon it as necessary until some revision of the modern concept of marriage can be secured.

This "crisis," the author believes, is economic in origin. The capitalistic system is the root-cause of the evil, since it imposes upon men hindrances to marriage and reproduction at an appropriate age. While she believes in marriage, as the ideal form for the union of the sexes, she makes it clear that in her opinion this relationship should be supplemented by another and freer union between the sexes which should receive the sanction of society. "In view of the increasing intensity of the struggle for existence," she says, "a struggle in which men are so strenuously engaged that the moments in which they can enjoy a truly human life seem to become even fewer, it is indispensable that the conditions which render possible an open, free and unencumbered intercourse between the sexual partners—today attained only through legal marriage—should be rendered attainable in other forms also of the sexual relationship."

The book is a brilliant one. The author is gifted, and thoroughly in earnest. It is the kind of book which could only have been

written by a woman of continental origin. It is bravely conceived, and the argument is presented in a form as fascinating as it is free from hypocrisies. It is the kind of book which no one can begin without desiring to finish it.

Even the puritan, who will object to the suggestion of "free love"—which the author nevertheless rejects—must acknowledge that the "crisis" described is a real one. Only this morning I read in the papers the statement that in Germany the excess of women over men has increased, since 1914, from 800,000 to 2,000,000; while in France, the government has already enacted laws for the legalizing of the thousands of illegitimate children born since the war, for the care of these children by the state and for the protection and honorable recognition of the mothers. How is Europe to be repopulated? Already polygamy, under some other name or of a more liberal fashion, has been seriously proposed. This book falls in line with this current of thought.

Read this book. Read it critically—but read it.

**JUETTNER: "MEDICAL PRACTICE"**

*A treatise on Medical Practice. Based on the Principles and Therapeutic Application of The Physical Modes and Methods of Treatment (Nonmedicinal Treatment).* By Otto Juettner, M. D. New York: The A. L. Chatterton Company. 1916. Price \$5.00.

This volume presents practically a revision and completion of the two earlier books by the same author, titled "Modern Physiotherapy" and "Physical Therapeutic Methods," both of which are well and favorably known to physicians. The author stresses the point that many people have been weaned away from drugs and that nonmedicinal treatment occupies a place in the therapy of disease the importance of which can not be neglected. Undoubtedly, there are many conditions of ill health that can be treated to better advantage by physical methods and without recourse to drugs than with the aid of orthodox drug-treatment. It is in view of these contingencies and in the interest of those physicians and patients who want to "throw physic to the dogs" that Doctor Juettner's book has been written. But, the other practitioners also, those who make use of drugs where they believe them indicated, will find much assistance in this treatise, for additional methods of therapy.

# Condensed Queries Answered

While the editors make replies to these queries as they are able, they are very far from wishing to monopolize the stage and would be pleased to hear from any reader who can furnish further and better information. Moreover, we would urge those seeking advice to report their results, whether good or bad. In all cases please give the number of the query when writing anything concerning it. Positively no attention paid to anonymous letters.

## Answers to Queries

ANSWER TO QUERY 6294.—“Pulmonary Phthisis.” I notice your answer to Query 6294, anent pulmonary phthisis, and I am agreed with your advice as to the treatment, except as concerns the “open-air treatment”; for, I think that not only common sense, but the nature of the human race dictates that the human is made to live in a house—to sleep in a house.

There was a time when I acquiesced in the teaching that living and sleeping in the open air is the right thing. Later observation and study, however, teaches me that the open-air theory must at least be qualified. This idea of broadly advising open-air, tent, and so forth, living has shortened the life of many, I feel sure. I have reason to know this by observation of cases in the hands of other physicians. There is a difference between fresh air and fresh air—we must not forget that. We can have fresh air, but, that need not be cold nor blowing.

Tuberculous patients take cold readily, and when the patient takes cold he to that extent is reduced in his resistive power, not

alone against the tubercle-bacillus, but the power of assimilation of food, his digestive powers are reduced by cold water or anything that increases catarrhal mucus in the digestive tract.

Colds cause fever—and fever prevents the cells along the digestive tract from discharging their poison, and also prevents them from taking up nutriment. Hence, the need of more study in this direction.

I have not time to go into this deeply now, also, have no idea of writing an article that is fit for publication at this time; my only purpose is, to help you get on to a rational basis for the treatment of tuberculosis; and I hope you will go into this more deeply and so help to interest other physicians in the study along the lines that will finally lead to rational treatment.

This is not written for publication, but, if you desire to use parts of this, you may do so, as I should be glad to hear from others.

R. WILLMAN.

St. Joseph, Mo.

## Queries

QUERY 6305.—“Stimulating Children’s Growth.” W. F. L., South Carolina, having read about a preparation that will stimulate the growth of retarded children, asks for information concerning that substance.

We are uncertain, whether you refer to a recent mention of the possibility of hypophysis medication proving helpful in this direction or to the more frequent recommendation of nuclein alone or (preferably) in a combination such as this: iron phosphate, gr. 1-12; calcium phosphate, gr. 1-12; potassium phosphate, gr. 1-12; magnesium phosphate, gr. 1-12; nuclein solution, m. 4; which has proven particularly serviceable in

stimulating growth in children, under certain circumstances. Also, in some instances, minute doses of thyroid gland will aid bodily growth, but, then, again, this substance may be contraindicated.

Therapy, in retarded development, to be effective, must be based upon recognition of the cause of existing conditions. A normal child gains about 6 pounds during the second year, 5 during the third, and 4 during the fourth. In most children, the gain is least during the summer months or the weight remains stationary. The most rapid increase is observed in autumn months. The slowest gain is from the fifth to the eighth year, when

it is not more than 4 pounds a year; while from the eighth to the eleventh year it rises to about 6 pounds each year. Up to the eleventh year, girls and boys gain in about the same ratio, but, from the eleventh to the thirteenth year, girls gain more rapidly and maintain the lead up to the fifteenth year, when again the boys forge ahead, and for good.

Conditions interfering with the proper growth or development there are many, among them, prominently, improper food and methods of feeding, unhygienic surroundings, and the consequences of diseases of childhood. These may cause specific affections or may lead to a condition of general malnutrition or marasmus.

Whatever the cause of the retardation of growth and the condition of the backward child may be, it manifestly is essential that both should be studied carefully and that the peculiarities of the case in hand should be considered in each particular instance before deciding what remedy is to be employed for correcting the backwardness. Experiments by which it was shown that the hypophysis is an important factor in regulating the bony growth had the purpose of showing just this fact, but we do not believe that mere backwardness in growth can be sufficient reason for administering pituitary substance.

Clinical experiments are fairly numerous in which such backwardness could be referred to a latent or inactive tuberculosis infection and satisfactory growth was induced by appropriate treatment for overcoming this pathologic condition. Other instances there are on record in which backward children were brought to normal development by proper attention to the tonsils, to existing intestinal intoxication and to various other abnormal conditions. At all events, it would be impossible to express a definite opinion or to offer general advice that could be applicable to every case.

QUERY 6306.—"Epilepsy." T. P. B., Georgia, writing about a case of epilepsy in a boy about 19 years old, says that he has tried nearly everything, but without very much benefit to the patient, although the attacks now are not as severe as before treatment. The Doctor now desires an expression of our opinion as to the curative value of *verbena hastata* and *solanum carolinense*, as recommended in Doctor French's little book. He submits the following history:

"The boy is well developed and matured, although his mind is not as active as it was

before he had these attacks. Two years ago, he was struck by lightning, which rendered him unconscious for about two hours. Ever since that time, he has been suffering from epileptic attacks. Several days before the attacks he is constantly whistling and singing, and teases everyone near him. After the fit has passed off, he is taciturn for several days. From four to six seizures of unconsciousness, biting of tongue, and so on, come on in one day. After such a period, he has no more seizures for the whole month following. The attacks occur every month at about the same time. A thorough physical examination reveals nothing unusual, except for a rapid heart (about 90 beats per minute), and slight mitral regurgitation. A sample of urine passed in the twenty-four hours measured 42 ounces. In all other respects, the boy is in good health. The laboratory report upon the specimen of urine shows some evidence of the presence of cystitis."

This certainly is a most interesting case, complicated by the fact that the electric discharge received by the patient renders it extremely difficult to estimate the amount or even the exact nature of the damage sustained by the nervous system; however, the character of the peculiar phenomena which precede and follow these seizures would lead us to pay particular attention to centers governing the sexual organs.

It is quite possible that the application of small fly-blisters upon the sacrum and along the spine, thorough circumcision, and dilatation of the anal sphincter would exert a decidedly beneficial effect. At the same time, of course, the vesical irritation must be removed. As a first step, certainly we should institute these measures, and then prescribe arbutin and hexamethylenamine in rather full doses, alternating these with *solanine* and *verbena hastata*.

At all times, of course, thorough intestinal elimination must be maintained, while, as soon as there is evidence of an oncoming attack, we should purge the patient briskly, at the same time allowing only the lightest and most easily digested food. Also, it might be well to give a few doses of atropine at this time. Of course, all the reflexes should be tested.

It is possible that all treatment will fail in this case, for the reason that the disturbances of the central nervous system resultant upon the lightning stroke may be too profound and irremediable.

QUERY 6307.—"Migraine of Obscure Origin." J. M., New York, has under treat-



ment a woman, aged thirty-eight, whose grandmother on her father's side had severe headaches for the greater part of her life. All her children were all their lives more or less subject to "sick-headaches." There is no nervous history on the mother's side. The patient has had, since she was four years old, attacks of "sick-headache" two or three times a year until two years ago. Now about every two weeks the patient has most terrible headaches, mostly over the left eye and extending through to the occipital region. Specialists have examined her for various pathological conditions, but only astigmatism was found and proper glasses were prescribed. Treatment for any possible hepatic torpidity has been tried without avail.

The attacks are sudden—preceded by a peculiar numb feeling coming over the body, then the heart "skips," and in ten minutes she is suffering intensely. The attacks come at any time of the month, without regard to her menses. She has taken on 40 pounds of flesh in three years and now weighs 140 pounds. Never had any miscarriage. Urine has a specific gravity of 1025, is of straw color, alkaline in reaction, free from albumen and sugar. For several months it has been necessary to use hypodermic injections of either morphine (gr. 1-4) or of hyoscine and morphine. By a small dose, pain is not relieved. The woman vomits material looking almost fecal.

The facts at our disposal do not permit of a definite diagnosis, so that it is impossible to prescribe intelligently. You state that the urine is alkaline in reaction, but do not give us any idea of the output of urea, or the presence or absence of indican, and so on. This is, probably, a retention-hemicrania, while, despite negative findings, the possibility of ovarian congestion must not be lost sight of. The peculiar numb feeling followed by erratic cardiac action speaks distinctly of a remote underlying cause. Test the reflexes carefully; examine the vertebra; see whether you can find hyperesthetic or anesthetic areas, on percussion.

If the patient is of the hysterical type, very positive suggestion, thorough elimination and the administration, at the first premonitory symptom, of cactin and strychnine with capsicum might prove promptly curative. We should also do gastric lavage, and administer copious high enemas.

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QUERY 6308.—"Preventing Precipitation of Tinctures by Water." C. A., Mexico, asks whether there is not some way to prevent

the annoying precipitation occurring when certain tinctures are diluted with water.

The reason for the phenomenon complained of is, of course, that the alcohol of the tincture or fluid extract extracts various principles insoluble in water, notably resins, tannins, coloring-matter, and chlorophyll. To obviate this objection, it is customary among dispensing pharmacists to add glycerin, although in the case of some drugs sugar (as syrup) will act similarly.

A certain proportion (determined by trial) of glycerin is dissolved in the alcoholic extraction and then the aqueous fluid is gradually incorporated, pouring a small portion of it into the bottle and shaking, and proceeding in this way until the entire amount has been added. Thus it is possible to produce a passably milky mixture (emulsion) even with tincture of benzoïn or myrrh, provided enough glycerin is present and the dispenser has acquired the "knack."

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QUERY 6309.—"Atelectasis?" J. E. B., Texas, asks for suggestions in the case of a woman of twenty-six, in apparently good health, who has been married some eight years and been confined four times. "The first child lived only a few hours, the second is said to have had convulsive symptoms during the first two or three days, but since then has done well. The third child lived nine hours, while the fourth, born probably a month prematurely three days ago, lived about thirty-six hours. At birth, the heart's action of the last two infants has been good, but there was marked atelectasis. Mucus was removed from the mouth and throat; rectal dilatation, Sylvester's method of artificial respiration, hot- and cold-water douches were employed, and such medication as appeared to be demanded. The labors have been short, lasting one to two hours, with practically no severe pains. Weight of last two children was 9 and 6 pounds respectively. The last time there was no pulsation in the cord after the birth of the child. The babies moan or whine and there is dulness on percussion over the lower portion of the lungs and absent respiratory sounds." Our correspondent wants to know whether any preparatory treatment of the mother, should she become pregnant again, would give the child a better chance.

It is, unfortunately, impossible for us to venture an opinion as to the cause of the infantile mortality in the case described. An aspiration-pneumonia may have been set up in one case, but it is hardly reasonable to suppose



that three out of four children could succumb from it. As the second child had "convulsive seizures for two or three days after birth," it is probable that a modified form of the same disorder existed there, also. The fact that the fourth child—probably prematurely delivered—lived thirty-six hours, while the first lived only a few hours and the third about nine, would lead us to consider interference very seriously. Should the woman become pregnant again, conclude the pregnancy as soon as viability is reasonably certain.

As you can readily understand, it would be impossible, without having a clearer conception of the causative condition, to institute prophylactic treatment. The mother, indeed, seems to be healthy. Under the circumstances, it is regrettable that a necropsy was not held upon at least one of the infants. Much might have been learned thereby. It would also be interesting to know something about the family history. Is there any luetic taint?

QUERY 6310.—"Amenorrhea of Obscure Origin." H. F. C., Massachusetts, asks whether we can advance a reason for amenorrhea in a woman of thirty-five who otherwise appears to be perfectly well. "Before her only child was born, in 1900, and till 1903, her periods were normal, then they became excessive. She would flow for ten days to three weeks each month, finally getting in a desperate condition, despite all treatment. Hot douches of carbolic acid and water finally stopped the flow, and then she did not have any menses from 1904 until 1911, when she 'came around' (probably because of reaching up and scrubbing a painted ceiling) in May, June, and July, but not again until January, February, and March, 1913. Then she saw a little blood in January, 1914; none since. Her first husband died in 1908. She remarried in 1910. She is not at all anemic."

Naturally, it is impossible for us to give a reason for the amenorrhea existing in your patient. A most thorough examination of the pelvic viscera should be made and a specimen of blood forwarded to a reliable pathologist, for examination. Look up the family-history. Is there any evidence of venereal taint? Any discharge from the uterus? Any retro- or anteversion? What is the condition of the cervical canal? Find out whether the patient ever has been curetted or had caustics applied to the endometrium.

QUERY 6311.—"Ataxia or Hysteria?" F. S., Illinois, requests help in the case of a woman,

fifty-four years of age, who always lived on a farm and enjoyed good health until about three months ago. She has had four children; got up on the fifth day with the first, but remained in bed for nine or ten days with the others. There is no history of syphilis in the family or of any hysterical relatives.

"This woman very often has crying-spells when she gets worried or afraid. She is compelled to drive to town with her husband, although mortally afraid of any horse, even the oldest. She seems very nervous and excitable and appears to worry over her condition considerably. She has slight prolapse of uterus and bladder and is very sensitive to examination, both in feeling and mind. Bromides and uterine tonics have been given with little or no results. The high-frequency current to vagina and uterus and autocondensation for ten to fifteen minutes, with occasional vibration, has been given every three days, but the patient is getting weaker and losing weight. A diagnosis has been made of superior ataxia, caused by a hysterical condition associated with the prolapsus. The most definite symptom is the constant exaggerated movements of the arm and forearm. She can hold it still by taking hold of something, but only for about fifteen seconds, and then it starts on its exaggerated movements again, from the shoulder down to the hand."

You say: "I made a diagnosis of superior ataxia, caused by a hysterical condition associated with prolapsus." We can not quite see how an ataxia could be caused by any hysterical state. Such a condition might be the result of an accompanying spinal lesion that would cause ataxia. On the other hand, there is no evidence of such lesion, while the vesical and uterine prolapse might easily produce hysteria.

The prolapsus should, of course, be corrected by surgical means. Aside from that, we should be inclined, on general principles, to eliminate thoroughly and then to push neuro-lecithin and nuclein in alternation with the arsenates or valerates of iron, strychnine, and quinine. We much doubt the serviceability of vibration.

What about the blood pressure and pulse rate? Are the reflexes exaggerated or absent? Institute a really thorough examination and report your findings in detail, sending at the same time specimen of the urine and blood to a competent pathologist. His report will aid you in your further procedure.